

Package ‘ggblanket’

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Title Simplify 'ggplot2' Visualisation

Version 5.1.0

Description Simplify 'ggplot2' visualisation with 'ggblanket' wrapper functions.

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dark_mode	<i>Dark theme for a ggplot</i>
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Description

Dark theme for a ggplot visualisation.

Usage

```
dark_mode(  
  base_size = 10,  
  base_family = "",  
  base_face = "plain",  
  base_pal = "#bbccdd",  
  title_family = NULL,  
  title_face = "bold",  
  title_pal = NULL,  
  title_size = ggplot2::rel(1.1),  
  title_vjust = 0,  
  title_margin = ggplot2::margin(t = base_size * -0.75, b = base_size * 2),  
  subtitle_family = NULL,  
  subtitle_face = NULL,  
  subtitle_pal = NULL,  
  subtitle_size = NULL,  
  subtitle_vjust = 1,  
  subtitle_margin = ggplot2::margin(t = base_size * -1, b = base_size + 10),  
  caption_family = NULL,  
  caption_face = NULL,  
  caption_alpha = 0.33,  
  caption_pal = base_pal,  
  caption_size = ggplot2::rel(0.9),  
  caption_hjust = 0,  
  caption_vjust = 1,  
  caption_margin = ggplot2::margin(t = base_size)  
)
```

Arguments

base_size	The base size of the text. Defaults to 10.
base_family	The base family of the text. Defaults to "".
base_face	The base face of the text. Defaults to "plain".
base_pal	The base colour of the text. Defaults to "#bbccdd".
title_family	The font family of the title. Defaults to the base_family.
title_face	The font face of the title. Defaults to "bold".
title_pal	The colour of the title. Defaults to the base_pal first element.

title_size	The size of the title. Defaults to the base_size * 1.1.
title_vjust	The vertical adjustment of the title. Defaults to 0.
title_margin	The margin of the title. A ggplot2::margin function.
subtitle_family	The font family of the subtitle. Defaults to the base_family.
subtitle_face	The font face of the subtitle. Defaults to the base_face.
subtitle_pal	The colour of the subtitle. Defaults to the base_pal first element.
subtitle_size	The size of the subtitle. Defaults to the base_size.
subtitle_vjust	The vertical adjustment of the subtitle. Defaults to 1.
subtitle_margin	The margin of the subtitle. A ggplot2::margin function.
caption_family	The font family of the caption. Defaults to the base_family.
caption_face	The font face of the caption. Defaults to the base_face.
caption_alpha	The alpha of the caption pal. Defaults to 0.33. Use 1 for no alpha.
caption_pal	The colour of the caption (before caption_alpha is applied). Defaults to the base_pal first element.
caption_size	The size of the caption. Defaults to the base_size * 0.9.
caption_hjust	The horizontal adjustment of the caption. Defaults to 0.
caption_vjust	The vertical adjustment of the caption. Defaults to 1.
caption_margin	The margin of the caption. A ggplot2::margin function.

Value

A ggplot theme.

Examples

```
library(palmerpenguins)
library(ggplot2)

#set for a plot
penguins |>
  gg_point(
    x = flipper_length_mm,
    y = body_mass_g,
    col = species,
    theme = dark_mode()
  )

#set globally
## Not run:
theme_set(dark_mode())

penguins |>
  gg_point(
    x = flipper_length_mm,
```

```
    y = body_mass_g,  
    col = species  
  )  
  
## End(Not run)
```

gg_area

Area ggplot

Description

Create an area ggplot with a wrapper around `ggplot2::geom_area(stat = "align", ...)`.

Usage

```
gg_area(  
  data = NULL,  
  x = NULL,  
  y = NULL,  
  col = NULL,  
  facet = NULL,  
  facet2 = NULL,  
  group = NULL,  
  text = NULL,  
  mapping = NULL,  
  stat = "align",  
  position = "stack",  
  coord = ggplot2::coord_cartesian(clip = "off"),  
  pal = NULL,  
  pal_na = pal_grey,  
  alpha = 0.9,  
  ...,  
  title = NULL,  
  subtitle = NULL,  
  x_breaks = NULL,  
  x_expand = NULL,  
  x_gridlines = NULL,  
  x_include = NULL,  
  x_labels = NULL,  
  x_limits = NULL,  
  x_oob = scales::oob_keep,  
  x_sec_axis = ggplot2::waiver(),  
  x_title = NULL,  
  x_trans = "identity",  
  y_breaks = NULL,  
  y_expand = NULL,
```

```

y_gridlines = NULL,
y_include = NULL,
y_labels = NULL,
y_limits = NULL,
y_oob = scales::oob_keep,
y_sec_axis = ggplot2::waiver(),
y_title = NULL,
y_trans = "identity",
col_breaks = NULL,
col_continuous = "gradient",
col_include = NULL,
col_labels = NULL,
col_legend_place = NULL,
col_legend_ncol = NULL,
col_legend_nrow = NULL,
col_legend_rev = FALSE,
col_limits = NULL,
col_oob = scales::oob_keep,
col_rescale = scales::rescale(),
col_title = NULL,
col_trans = "identity",
facet_labels = NULL,
facet_ncol = NULL,
facet_nrow = NULL,
facet_scales = "fixed",
facet_space = "fixed",
facet_layout = NULL,
facet_switch = NULL,
linetype_title = NULL,
shape_title = NULL,
size_title = NULL,
caption = NULL,
titles = snakecase::to_sentence_case,
theme = NULL
)

```

Arguments

<code>data</code>	A data frame or tibble.
<code>x</code>	Unquoted x aesthetic variable.
<code>y</code>	Unquoted y aesthetic variable.
<code>col</code>	Unquoted col and fill aesthetic variable.
<code>facet</code>	Unquoted facet aesthetic variable.
<code>facet2</code>	Unquoted second facet variable.
<code>group</code>	Unquoted group aesthetic variable.
<code>text</code>	Unquoted text aesthetic variable.

mapping	Map additional aesthetics using the <code>ggplot2::aes</code> function (e.g. <code>shape</code>). Excludes colour, fill or alpha.
stat	A <code>ggplot2</code> character string stat.
position	Position adjustment. Either a character string (e.g. <code>"identity"</code>), or a function (e.g. <code>ggplot2::position_identity()</code>).
coord	A coordinate function from <code>ggplot2</code> (e.g. <code>ggplot2::coord_cartesian(clip = "off")</code>).
pal	Colours to use. A character vector of hex codes (or names).
pal_na	Colour to use for NA values. A character vector of a hex code (or name).
alpha	Opacity. A number between 0 and 1.
...	Other arguments passed to the <code>ggplot2::geom_area</code> function.
title	Title string.
subtitle	Subtitle string.
x_breaks	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
x_expand	Padding to the limits with the <code>ggplot2::expansion</code> function, or a vector of length 2 (e.g. <code>c(0, 0)</code>).
x_gridlines	TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.
x_include	For a continuous x variable, any values that the limits should encompass (e.g. 0).
x_labels	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
x_limits	A vector of length 2 to determine the limits of the axis.
x_oob	For a continuous x variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
x_sec_axis	A secondary axis using the <code>ggplot2::sec_axis</code> or <code>ggplot2::dup_axis</code> function.
x_title	Axis title string. Use "" for no title.
x_trans	For a numeric x variable, a transformation object (e.g. <code>"log10"</code> , <code>"sqrt"</code> or <code>"reverse"</code>).
y_breaks	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
y_expand	Padding to the limits with the <code>ggplot2::expansion</code> function, or a vector of length 2 (e.g. <code>c(0, 0)</code>).
y_gridlines	TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.
y_include	For a continuous y variable, any values that the limits should encompass (e.g. 0).
y_labels	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
y_limits	A vector of length 2 to determine the limits of the axis.
y_oob	For a continuous y variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .

<code>y_sec_axis</code>	A secondary axis using the <code>ggplot2::sec_axis</code> or <code>ggplot2::dup_axis</code> function.
<code>y_title</code>	Axis title string. Use "" for no title.
<code>y_trans</code>	For a numeric y variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
<code>col_breaks</code>	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
<code>col_continuous</code>	For a continuous col variable, the type of colouring. Either "gradient" or "steps". Defaults to "gradient".
<code>col_include</code>	For a continuous col variable, any values that the limits should encompass (e.g. 0).
<code>col_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
<code>col_legend_place</code>	The place for the legend. Either "bottom", "right", "top" or "left". Or just the first letter of each.
<code>col_legend_ncol</code>	The number of columns for the legend elements.
<code>col_legend_nrow</code>	The number of rows for the legend elements.
<code>col_legend_rev</code>	Reverse the elements of the legend. Defaults to FALSE.
<code>col_limits</code>	A vector to determine the limits of the colour scale.
<code>col_oob</code>	For a continuous col variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
<code>col_rescale</code>	For a continuous col variable, a <code>scales::rescale</code> function.
<code>col_title</code>	Legend title string. Use "" for no title.
<code>col_trans</code>	For a numeric col variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
<code>facet_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a named vector of labels (e.g. <code>c("value" = "label", ...)</code>).
<code>facet_ncol</code>	The number of columns of facets. Only applies to a facet layout of "wrap".
<code>facet_nrow</code>	The number of rows of facets. Only applies to a facet layout of "wrap".
<code>facet_scales</code>	Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
<code>facet_space</code>	Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".
<code>facet_layout</code>	Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or <code>facet2</code>) argument is provided, then defaults to "wrap". If NULL and both <code>facet</code> and <code>facet2</code> arguments are provided, defaults to "grid".
<code>facet_switch</code>	Whether the facet layout is "grid", whether to switch the facet labels to the opposite side of the plot. Either "x", "y" or "both".
<code>linetype_title</code>	Legend title string. Use "" for no title.

shape_title	Legend title string. Use "" for no title.
size_title	Legend title string. Use "" for no title.
caption	Caption title string.
titles	A function to format unspecified titles. Defaults to snakecase::to_sentence_case.
theme	A ggplot2 theme.

Value

A ggplot object.

Examples

```
ggplot2::economics |>
  gg_area(
    x = date,
    y = unemploy,
    y_title = "Unemployment",
    pal = "#1B9E77"
  )
```

gg_bar

Bar ggplot

Description

Create a bar ggplot with a wrapper around ggplot2::geom_bar(stat = "count", ...).

Usage

```
gg_bar(
  data = NULL,
  x = NULL,
  y = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  text = NULL,
  mapping = NULL,
  stat = "count",
  position = "stack",
  coord = ggplot2::coord_cartesian(clip = "off"),
  pal = NULL,
  pal_na = pal_grey,
  alpha = 0.9,
  ...,
)
```

```
title = NULL,
subtitle = NULL,
x_breaks = NULL,
x_expand = NULL,
x_gridlines = NULL,
x_include = NULL,
x_labels = NULL,
x_limits = NULL,
x_oob = scales::oob_keep,
x_sec_axis = ggplot2::waiver(),
x_title = NULL,
x_trans = "identity",
y_breaks = NULL,
y_expand = NULL,
y_gridlines = NULL,
y_include = NULL,
y_labels = NULL,
y_limits = NULL,
y_oob = scales::oob_keep,
y_sec_axis = ggplot2::waiver(),
y_title = NULL,
y_trans = "identity",
col_breaks = NULL,
col_continuous = "gradient",
col_include = NULL,
col_labels = NULL,
col_legend_place = NULL,
col_legend_ncol = NULL,
col_legend_nrow = NULL,
col_legend_rev = FALSE,
col_limits = NULL,
col_oob = scales::oob_keep,
col_rescale = scales::rescale(),
col_title = NULL,
col_trans = "identity",
facet_labels = NULL,
facet_ncol = NULL,
facet_nrow = NULL,
facet_scales = "fixed",
facet_space = "fixed",
facet_layout = NULL,
facet_switch = NULL,
linetype_title = NULL,
shape_title = NULL,
size_title = NULL,
caption = NULL,
titles = snakecase::to_sentence_case,
theme = NULL
```

)

Arguments

data	A data frame or tibble.
x	Unquoted x aesthetic variable.
y	Unquoted y aesthetic variable.
col	Unquoted col and fill aesthetic variable.
facet	Unquoted facet aesthetic variable.
facet2	Unquoted second facet variable.
group	Unquoted group aesthetic variable.
text	Unquoted text aesthetic variable.
mapping	Map additional aesthetics using the <code>ggplot2::aes</code> function (e.g. <code>shape</code>). Excludes colour, fill or alpha.
stat	A <code>ggplot2</code> character string stat.
position	Position adjustment. Either a character string (e.g. <code>"identity"</code>), or a function (e.g. <code>ggplot2::position_identity()</code>).
coord	A coordinate function from <code>ggplot2</code> (e.g. <code>ggplot2::coord_cartesian(clip = "off")</code>).
pal	Colours to use. A character vector of hex codes (or names).
pal_na	Colour to use for NA values. A character vector of a hex code (or name).
alpha	Opacity. A number between 0 and 1.
...	Other arguments passed to the <code>ggplot2::geom_bar</code> function.
title	Title string.
subtitle	Subtitle string.
x_breaks	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
x_expand	Padding to the limits with the <code>ggplot2::expansion</code> function, or a vector of length 2 (e.g. <code>c(0, 0)</code>).
x_gridlines	TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.
x_include	For a continuous x variable, any values that the limits should encompass (e.g. 0).
x_labels	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
x_limits	A vector of length 2 to determine the limits of the axis.
x_oob	For a continuous x variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
x_sec_axis	A secondary axis using the <code>ggplot2::sec_axis</code> or <code>ggplot2::dup_axis</code> function.
x_title	Axis title string. Use "" for no title.
x_trans	For a numeric x variable, a transformation object (e.g. <code>"log10"</code> , <code>"sqrt"</code> or <code>"reverse"</code>).

<code>y_breaks</code>	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
<code>y_expand</code>	Padding to the limits with the <code>ggplot2::expansion</code> function, or a vector of length 2 (e.g. <code>c(0, 0)</code>).
<code>y_gridlines</code>	TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.
<code>y_include</code>	For a continuous y variable, any values that the limits should encompass (e.g. 0).
<code>y_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
<code>y_limits</code>	A vector of length 2 to determine the limits of the axis.
<code>y_oob</code>	For a continuous y variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
<code>y_sec_axis</code>	A secondary axis using the <code>ggplot2::sec_axis</code> or <code>ggplot2::dup_axis</code> function.
<code>y_title</code>	Axis title string. Use "" for no title.
<code>y_trans</code>	For a numeric y variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
<code>col_breaks</code>	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
<code>col_continuous</code>	For a continuous col variable, the type of colouring. Either "gradient" or "steps". Defaults to "gradient".
<code>col_include</code>	For a continuous col variable, any values that the limits should encompass (e.g. 0).
<code>col_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
<code>col_legend_place</code>	The place for the legend. Either "bottom", "right", "top" or "left". Or just the first letter of each.
<code>col_legend_ncol</code>	The number of columns for the legend elements.
<code>col_legend_nrow</code>	The number of rows for the legend elements.
<code>col_legend_rev</code>	Reverse the elements of the legend. Defaults to FALSE.
<code>col_limits</code>	A vector to determine the limits of the colour scale.
<code>col_oob</code>	For a continuous col variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
<code>col_rescale</code>	For a continuous col variable, a <code>scales::rescale</code> function.
<code>col_title</code>	Legend title string. Use "" for no title.
<code>col_trans</code>	For a numeric col variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
<code>facet_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a named vector of labels (e.g. <code>c("value" = "label", ...)</code>).
<code>facet_ncol</code>	The number of columns of facets. Only applies to a facet layout of "wrap".

facet_nrow	The number of rows of facets. Only applies to a facet layout of "wrap".
facet_scales	Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
facet_space	Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".
facet_layout	Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or facet2) argument is provided, then defaults to "wrap". If NULL and both facet and facet2 arguments are provided, defaults to "grid".
facet_switch	Whether the facet layout is "grid", whether to switch the facet labels to the opposite side of the plot. Either "x", "y" or "both".
linetype_title	Legend title string. Use "" for no title.
shape_title	Legend title string. Use "" for no title.
size_title	Legend title string. Use "" for no title.
caption	Caption title string.
titles	A function to format unspecified titles. Defaults to snakecase::to_sentence_case.
theme	A ggplot2 theme.

Value

A ggplot object.

Examples

```
library(dplyr)
library(palmerpenguins)

penguins |>
  gg_bar(
    x = sex,
    col = sex,
    facet = species,
    width = 0.75,
    x_labels = stringr::str_to_sentence,
    pal = c("#1B9E77", "#9E361B")
  )
```

gg_bin_2d

Bin_2d ggplot

Description

Create a bin2d ggplot with a wrapper around ggplot2::geom_bin_2d(stat = "bin2d", ...).

Usage

```
gg_bin_2d(  
  data = NULL,  
  x = NULL,  
  y = NULL,  
  facet = NULL,  
  facet2 = NULL,  
  group = NULL,  
  text = NULL,  
  mapping = NULL,  
  stat = "bin2d",  
  position = "identity",  
  coord = ggplot2::coord_cartesian(clip = "off"),  
  pal = NULL,  
  pal_na = pal_grey,  
  alpha = 1,  
  ...,  
  title = NULL,  
  subtitle = NULL,  
  x_breaks = NULL,  
  x_expand = NULL,  
  x_gridlines = NULL,  
  x_include = NULL,  
  x_labels = NULL,  
  x_limits = NULL,  
  x_oob = scales::oob_keep,  
  x_sec_axis = ggplot2::waiver(),  
  x_title = NULL,  
  x_trans = "identity",  
  y_breaks = NULL,  
  y_expand = NULL,  
  y_gridlines = NULL,  
  y_include = NULL,  
  y_labels = NULL,  
  y_limits = NULL,  
  y_oob = scales::oob_keep,  
  y_sec_axis = ggplot2::waiver(),  
  y_title = NULL,  
  y_trans = "identity",  
  col_breaks = NULL,  
  col_continuous = "gradient",  
  col_include = NULL,  
  col_labels = NULL,  
  col_legend_place = NULL,  
  col_legend_ncol = NULL,  
  col_legend_nrow = NULL,  
  col_legend_rev = FALSE,  
  col_limits = NULL,  
)
```

```

col_oob = scales::oob_keep,
col_rescale = scales::rescale(),
col_title = NULL,
col_trans = "identity",
facet_labels = NULL,
facet_ncol = NULL,
facet_nrow = NULL,
facet_scales = "fixed",
facet_space = "fixed",
facet_layout = NULL,
facet_switch = NULL,
linetype_title = NULL,
shape_title = NULL,
size_title = NULL,
caption = NULL,
titles = snakecase::to_sentence_case,
theme = NULL
)

```

Arguments

<code>data</code>	A data frame or tibble.
<code>x</code>	Unquoted x aesthetic variable.
<code>y</code>	Unquoted y aesthetic variable.
<code>facet</code>	Unquoted facet aesthetic variable.
<code>facet2</code>	Unquoted second facet variable.
<code>group</code>	Unquoted group aesthetic variable.
<code>text</code>	Unquoted text aesthetic variable.
<code>mapping</code>	Map additional aesthetics using the <code>ggplot2::aes</code> function (e.g. <code>shape</code>). Excludes colour, fill or alpha.
<code>stat</code>	A <code>ggplot2</code> character string stat.
<code>position</code>	Position adjustment. Either a character string (e.g. <code>"identity"</code>), or a function (e.g. <code>ggplot2::position_identity()</code>).
<code>coord</code>	A coordinate function from <code>ggplot2</code> (e.g. <code>ggplot2::coord_cartesian(clip = "off")</code>).
<code>pal</code>	Colours to use. A character vector of hex codes (or names).
<code>pal_na</code>	Colour to use for NA values. A character vector of a hex code (or name).
<code>alpha</code>	Opacity. A number between 0 and 1.
<code>...</code>	Other arguments passed to the <code>ggplot2::geom_bin_2d</code> function.
<code>title</code>	Title string.
<code>subtitle</code>	Subtitle string.
<code>x_breaks</code>	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
<code>x_expand</code>	Padding to the limits with the <code>ggplot2::expansion</code> function, or a vector of length 2 (e.g. <code>c(0, 0)</code>).

<code>x_gridlines</code>	TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.
<code>x_include</code>	For a continuous x variable, any values that the limits should encompass (e.g. 0).
<code>x_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
<code>x_limits</code>	A vector of length 2 to determine the limits of the axis.
<code>x_oob</code>	For a continuous x variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
<code>x_sec_axis</code>	A secondary axis using the <code>ggplot2::sec_axis</code> or <code>ggplot2::dup_axis</code> function.
<code>x_title</code>	Axis title string. Use "" for no title.
<code>x_trans</code>	For a numeric x variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
<code>y_breaks</code>	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
<code>y_expand</code>	Padding to the limits with the <code>ggplot2::expansion</code> function, or a vector of length 2 (e.g. <code>c(0, 0)</code>).
<code>y_gridlines</code>	TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.
<code>y_include</code>	For a continuous y variable, any values that the limits should encompass (e.g. 0).
<code>y_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
<code>y_limits</code>	A vector of length 2 to determine the limits of the axis.
<code>y_oob</code>	For a continuous y variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
<code>y_sec_axis</code>	A secondary axis using the <code>ggplot2::sec_axis</code> or <code>ggplot2::dup_axis</code> function.
<code>y_title</code>	Axis title string. Use "" for no title.
<code>y_trans</code>	For a numeric y variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
<code>col_breaks</code>	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
<code>col_continuous</code>	For a continuous col variable, the type of colouring. Either "gradient" or "steps". Defaults to "gradient".
<code>col_include</code>	For a continuous col variable, any values that the limits should encompass (e.g. 0).
<code>col_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
<code>col_legend_place</code>	The place for the legend. Either "bottom", "right", "top" or "left". Or just the first letter of each.
<code>col_legend_ncol</code>	The number of columns for the legend elements.

col_legend_nrow	The number of rows for the legend elements.
col_legend_rev	Reverse the elements of the legend. Defaults to FALSE.
col_limits	A vector to determine the limits of the colour scale.
col_oob	For a continuous col variable, a scales::oob_* function of how to handle values outside of limits (e.g. scales::oob_keep). Defaults to scales::oob_keep.
col_rescale	For a continuous col variable, a scales::rescale function.
col_title	Legend title string. Use "" for no title.
col_trans	For a numeric col variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
facet_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a named vector of labels (e.g. c("value" = "label", ...)).
facet_ncol	The number of columns of facets. Only applies to a facet layout of "wrap".
facet_nrow	The number of rows of facets. Only applies to a facet layout of "wrap".
facet_scales	Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
facet_space	Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".
facet_layout	Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or facet2) argument is provided, then defaults to "wrap". If NULL and both facet and facet2 arguments are provided, defaults to "grid".
facet_switch	Whether the facet layout is "grid", whether to switch the facet labels to the opposite side of the plot. Either "x", "y" or "both".
linetype_title	Legend title string. Use "" for no title.
shape_title	Legend title string. Use "" for no title.
size_title	Legend title string. Use "" for no title.
caption	Caption title string.
titles	A function to format unspecified titles. Defaults to snakecase::to_sentence_case.
theme	A ggplot2 theme.

Value

A ggplot object.

Examples

```
ggplot2::diamonds |>
  gg_bin_2d(
    x = carat,
    y = price,
    pal = viridis::cividis(9)
  )
```

`gg_blank`*Blank ggplot*

Description

Create a blank ggplot with a wrapper around `ggplot2::geom_blank()`.

Usage

```
gg_blank(  
  data = NULL,  
  x = NULL,  
  y = NULL,  
  col = NULL,  
  facet = NULL,  
  facet2 = NULL,  
  group = NULL,  
  xmin = NULL,  
  xmax = NULL,  
  xend = NULL,  
  ymin = NULL,  
  ymax = NULL,  
  yend = NULL,  
  z = NULL,  
  sample = NULL,  
  label = NULL,  
  subgroup = NULL,  
  mapping = NULL,  
  stat = "identity",  
  position = "identity",  
  coord = ggplot2::coord_cartesian(clip = "off"),  
  pal = NULL,  
  pal_na = pal_grey,  
  ...,  
  title = NULL,  
  subtitle = NULL,  
  x_breaks = NULL,  
  x_expand = NULL,  
  x_gridlines = NULL,  
  x_include = NULL,  
  x_labels = NULL,  
  x_limits = NULL,  
  x_oob = scales::oob_keep,  
  x_sec_axis = ggplot2::waiver(),  
  x_title = NULL,  
  x_trans = "identity",  
  y_breaks = NULL,
```

```
y_expand = NULL,  
y_gridlines = NULL,  
y_include = NULL,  
y_labels = NULL,  
y_limits = NULL,  
y_oob = scales::oob_keep,  
y_sec_axis = ggplot2::waiver(),  
y_title = NULL,  
y_trans = "identity",  
col_breaks = NULL,  
col_continuous = "gradient",  
col_include = NULL,  
col_labels = NULL,  
col_legend_place = NULL,  
col_legend_ncol = NULL,  
col_legend_nrow = NULL,  
col_legend_rev = FALSE,  
col_limits = NULL,  
col_oob = scales::oob_keep,  
col_rescale = scales::rescale(),  
col_title = NULL,  
col_trans = "identity",  
facet_labels = NULL,  
facet_ncol = NULL,  
facet_nrow = NULL,  
facet_scales = "fixed",  
facet_space = "fixed",  
facet_layout = NULL,  
facet_switch = NULL,  
linetype_title = NULL,  
shape_title = NULL,  
size_title = NULL,  
caption = NULL,  
titles = snakecase::to_sentence_case,  
theme = NULL  
)
```

Arguments

data	A data frame or tibble.
x	Unquoted x aesthetic variable.
y	Unquoted y aesthetic variable.
col	Unquoted col and fill aesthetic variable.
facet	Unquoted facet aesthetic variable.
facet2	Unquoted second facet variable.
group	Unquoted group aesthetic variable.
xmin	Unquoted xmin aesthetic variable.

<code>xmax</code>	Unquoted <code>xmax</code> aesthetic variable.
<code>xend</code>	Unquoted <code>xend</code> aesthetic variable.
<code>ymin</code>	Unquoted <code>ymin</code> aesthetic variable.
<code>ymax</code>	Unquoted <code>ymax</code> aesthetic variable.
<code>yend</code>	Unquoted <code>yend</code> aesthetic variable.
<code>z</code>	Unquoted <code>z</code> aesthetic variable.
<code>sample</code>	Unquoted <code>sample</code> aesthetic variable.
<code>label</code>	Unquoted <code>label</code> aesthetic variable.
<code>subgroup</code>	Unquoted <code>subgroup</code> aesthetic variable.
<code>mapping</code>	Map additional aesthetics using the <code>ggplot2::aes</code> function (e.g. <code>shape</code>). Excludes <code>colour</code> , <code>fill</code> or <code>alpha</code> .
<code>stat</code>	A <code>ggplot2</code> character string <code>stat</code> .
<code>position</code>	Position adjustment. Either a character string (e.g. <code>"identity"</code>), or a function (e.g. <code>ggplot2::position_identity()</code>).
<code>coord</code>	A coordinate function from <code>ggplot2</code> (e.g. <code>ggplot2::coord_cartesian(clip = "off")</code>).
<code>pal</code>	Colours to use. A character vector of hex codes (or names).
<code>pal_na</code>	Colour to use for NA values. A character vector of a hex code (or name).
<code>...</code>	Other arguments passed to the <code>ggplot2::geom_blank</code> function.
<code>title</code>	Title string.
<code>subtitle</code>	Subtitle string.
<code>x_breaks</code>	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
<code>x_expand</code>	Padding to the limits with the <code>ggplot2::expansion</code> function, or a vector of length 2 (e.g. <code>c(0, 0)</code>).
<code>x_gridlines</code>	TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.
<code>x_include</code>	For a continuous x variable, any values that the limits should encompass (e.g. 0).
<code>x_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
<code>x_limits</code>	A vector of length 2 to determine the limits of the axis.
<code>x_oob</code>	For a continuous x variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
<code>x_sec_axis</code>	A secondary axis using the <code>ggplot2::sec_axis</code> or <code>ggplot2::dup_axis</code> function.
<code>x_title</code>	Axis title string. Use <code>""</code> for no title.
<code>x_trans</code>	For a numeric x variable, a transformation object (e.g. <code>"log10"</code> , <code>"sqrt"</code> or <code>"reverse"</code>).
<code>y_breaks</code>	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
<code>y_expand</code>	Padding to the limits with the <code>ggplot2::expansion</code> function, or a vector of length 2 (e.g. <code>c(0, 0)</code>).

<code>y_gridlines</code>	TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.
<code>y_include</code>	For a continuous y variable, any values that the limits should encompass (e.g. 0).
<code>y_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
<code>y_limits</code>	A vector of length 2 to determine the limits of the axis.
<code>y_oob</code>	For a continuous y variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
<code>y_sec_axis</code>	A secondary axis using the <code>ggplot2::sec_axis</code> or <code>ggplot2::dup_axis</code> function.
<code>y_title</code>	Axis title string. Use "" for no title.
<code>y_trans</code>	For a numeric y variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
<code>col_breaks</code>	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
<code>col_continuous</code>	For a continuous col variable, the type of colouring. Either "gradient" or "steps". Defaults to "gradient".
<code>col_include</code>	For a continuous col variable, any values that the limits should encompass (e.g. 0).
<code>col_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
<code>col_legend_place</code>	The place for the legend. Either "bottom", "right", "top" or "left". Or just the first letter of each.
<code>col_legend_ncol</code>	The number of columns for the legend elements.
<code>col_legend_nrow</code>	The number of rows for the legend elements.
<code>col_legend_rev</code>	Reverse the elements of the legend. Defaults to FALSE.
<code>col_limits</code>	A vector to determine the limits of the colour scale.
<code>col_oob</code>	For a continuous col variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
<code>col_rescale</code>	For a continuous col variable, a <code>scales::rescale</code> function.
<code>col_title</code>	Legend title string. Use "" for no title.
<code>col_trans</code>	For a numeric col variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
<code>facet_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a named vector of labels (e.g. <code>c("value" = "label", ...)</code>).
<code>facet_ncol</code>	The number of columns of facets. Only applies to a facet layout of "wrap".
<code>facet_nrow</code>	The number of rows of facets. Only applies to a facet layout of "wrap".
<code>facet_scales</code>	Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".

facet_space	Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".
facet_layout	Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or facet2) argument is provided, then defaults to "wrap". If NULL and both facet and facet2 arguments are provided, defaults to "grid".
facet_switch	Whether the facet layout is "grid", whether to switch the facet labels to the opposite side of the plot. Either "x", "y" or "both".
linetype_title	Legend title string. Use "" for no title.
shape_title	Legend title string. Use "" for no title.
size_title	Legend title string. Use "" for no title.
caption	Caption title string.
titles	A function to format unspecified titles. Defaults to snakecase::to_sentence_case.
theme	A ggplot2 theme.

Value

A ggplot object.

Examples

```
library(dplyr)
library(palmerpenguins)

penguins |>
  gg_blank(
    x = flipper_length_mm,
    y = body_mass_g,
    col = sex,
    facet = species,
    col_labels = stringr::str_to_sentence,
    pal = c("#1B9E77", "#9E361B")
  )
```

gg_boxplot

Boxplot ggplot

Description

Create a boxplot ggplot with a wrapper around ggplot2::geom_boxplot(stat = "boxplot", ...).

Usage

```
gg_boxplot(  
  data = NULL,  
  x = NULL,  
  y = NULL,  
  col = NULL,  
  facet = NULL,  
  facet2 = NULL,  
  group = NULL,  
  text = NULL,  
  mapping = NULL,  
  stat = "boxplot",  
  position = "dodge2",  
  coord = ggplot2::coord_cartesian(clip = "off"),  
  pal = NULL,  
  pal_na = pal_grey,  
  alpha = 0.5,  
  ...,  
  title = NULL,  
  subtitle = NULL,  
  x_breaks = NULL,  
  x_expand = NULL,  
  x_gridlines = NULL,  
  x_include = NULL,  
  x_labels = NULL,  
  x_limits = NULL,  
  x_oob = scales::oob_keep,  
  x_sec_axis = ggplot2::waiver(),  
  x_title = NULL,  
  x_trans = "identity",  
  y_breaks = NULL,  
  y_expand = NULL,  
  y_gridlines = NULL,  
  y_include = NULL,  
  y_labels = NULL,  
  y_limits = NULL,  
  y_oob = scales::oob_keep,  
  y_sec_axis = ggplot2::waiver(),  
  y_title = NULL,  
  y_trans = "identity",  
  col_breaks = NULL,  
  col_continuous = "gradient",  
  col_include = NULL,  
  col_labels = NULL,  
  col_legend_place = NULL,  
  col_legend_ncol = NULL,  
  col_legend_nrow = NULL,  
  col_legend_rev = FALSE,
```

```

col_limits = NULL,
col_oob = scales::oob_keep,
col_rescale = scales::rescale(),
col_title = NULL,
col_trans = "identity",
facet_labels = NULL,
facet_ncol = NULL,
facet_nrow = NULL,
facet_scales = "fixed",
facet_space = "fixed",
facet_layout = NULL,
facet_switch = NULL,
linetype_title = NULL,
shape_title = NULL,
size_title = NULL,
caption = NULL,
titles = snakecase::to_sentence_case,
theme = NULL
)

```

Arguments

<code>data</code>	A data frame or tibble.
<code>x</code>	Unquoted x aesthetic variable.
<code>y</code>	Unquoted y aesthetic variable.
<code>col</code>	Unquoted col and fill aesthetic variable.
<code>facet</code>	Unquoted facet aesthetic variable.
<code>facet2</code>	Unquoted second facet variable.
<code>group</code>	Unquoted group aesthetic variable.
<code>text</code>	Unquoted text aesthetic variable.
<code>mapping</code>	Map additional aesthetics using the <code>ggplot2::aes</code> function (e.g. <code>shape</code>). Excludes colour, fill or alpha.
<code>stat</code>	A <code>ggplot2</code> character string stat.
<code>position</code>	Position adjustment. Either a character string (e.g. <code>"identity"</code>), or a function (e.g. <code>ggplot2::position_identity()</code>).
<code>coord</code>	A coordinate function from <code>ggplot2</code> (e.g. <code>ggplot2::coord_cartesian(clip = "off")</code>).
<code>pal</code>	Colours to use. A character vector of hex codes (or names).
<code>pal_na</code>	Colour to use for NA values. A character vector of a hex code (or name).
<code>alpha</code>	Opacity. A number between 0 and 1.
<code>...</code>	Other arguments passed to the <code>ggplot2::geom_boxplot</code> function.
<code>title</code>	Title string.
<code>subtitle</code>	Subtitle string.
<code>x_breaks</code>	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.

x_expand	Padding to the limits with the <code>ggplot2::expansion</code> function, or a vector of length 2 (e.g. <code>c(0, 0)</code>).
x_gridlines	TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.
x_include	For a continuous x variable, any values that the limits should encompass (e.g. 0).
x_labels	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
x_limits	A vector of length 2 to determine the limits of the axis.
x_oob	For a continuous x variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
x_sec_axis	A secondary axis using the <code>ggplot2::sec_axis</code> or <code>ggplot2::dup_axis</code> function.
x_title	Axis title string. Use "" for no title.
x_trans	For a numeric x variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
y_breaks	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
y_expand	Padding to the limits with the <code>ggplot2::expansion</code> function, or a vector of length 2 (e.g. <code>c(0, 0)</code>).
y_gridlines	TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.
y_include	For a continuous y variable, any values that the limits should encompass (e.g. 0).
y_labels	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
y_limits	A vector of length 2 to determine the limits of the axis.
y_oob	For a continuous y variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
y_sec_axis	A secondary axis using the <code>ggplot2::sec_axis</code> or <code>ggplot2::dup_axis</code> function.
y_title	Axis title string. Use "" for no title.
y_trans	For a numeric y variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
col_breaks	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
col_continuous	For a continuous col variable, the type of colouring. Either "gradient" or "steps". Defaults to "gradient".
col_include	For a continuous col variable, any values that the limits should encompass (e.g. 0).
col_labels	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
col_legend_place	The place for the legend. Either "bottom", "right", "top" or "left". Or just the first letter of each.

<code>col_legend_ncol</code>	The number of columns for the legend elements.
<code>col_legend_nrow</code>	The number of rows for the legend elements.
<code>col_legend_rev</code>	Reverse the elements of the legend. Defaults to FALSE.
<code>col_limits</code>	A vector to determine the limits of the colour scale.
<code>col_oob</code>	For a continuous col variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
<code>col_rescale</code>	For a continuous col variable, a <code>scales::rescale</code> function.
<code>col_title</code>	Legend title string. Use "" for no title.
<code>col_trans</code>	For a numeric col variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
<code>facet_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a named vector of labels (e.g. <code>c("value" = "label", ...)</code>).
<code>facet_ncol</code>	The number of columns of facets. Only applies to a facet layout of "wrap".
<code>facet_nrow</code>	The number of rows of facets. Only applies to a facet layout of "wrap".
<code>facet_scales</code>	Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
<code>facet_space</code>	Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".
<code>facet_layout</code>	Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or <code>facet2</code>) argument is provided, then defaults to "wrap". If NULL and both <code>facet</code> and <code>facet2</code> arguments are provided, defaults to "grid".
<code>facet_switch</code>	Whether the facet layout is "grid", whether to switch the facet labels to the opposite side of the plot. Either "x", "y" or "both".
<code>linetype_title</code>	Legend title string. Use "" for no title.
<code>shape_title</code>	Legend title string. Use "" for no title.
<code>size_title</code>	Legend title string. Use "" for no title.
<code>caption</code>	Caption title string.
<code>titles</code>	A function to format unspecified titles. Defaults to <code>snakecase::to_sentence_case</code> .
<code>theme</code>	A <code>ggplot2</code> theme.

Value

A `ggplot` object.

Examples

```
library(dplyr)
library(palmerpenguins)

penguins |>
  gg_boxplot(
    x = sex,
    y = body_mass_g,
    col = sex,
    facet = species,
    x_labels = snakecase::to_sentence_case,
    pal = c("#1B9E77", "#9E361B")
  )
```

gg_col

Col ggplot

Description

Create a col ggplot with a wrapper around `ggplot2::geom_bar(stat = "identity", ...)`.

Usage

```
gg_col(
  data = NULL,
  x = NULL,
  y = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  text = NULL,
  mapping = NULL,
  stat = "identity",
  position = "stack",
  coord = ggplot2::coord_cartesian(clip = "off"),
  pal = NULL,
  pal_na = pal_grey,
  alpha = 0.9,
  ...,
  title = NULL,
  subtitle = NULL,
  x_breaks = NULL,
  x_expand = NULL,
  x_gridlines = NULL,
  x_include = NULL,
```

```

x_labels = NULL,
x_limits = NULL,
x_oob = scales::oob_keep,
x_sec_axis = ggplot2::waiver(),
x_title = NULL,
x_trans = "identity",
y_breaks = NULL,
y_expand = NULL,
y_gridlines = NULL,
y_include = NULL,
y_labels = NULL,
y_limits = NULL,
y_oob = scales::oob_keep,
y_sec_axis = ggplot2::waiver(),
y_title = NULL,
y_trans = "identity",
col_breaks = NULL,
col_continuous = "gradient",
col_include = NULL,
col_labels = NULL,
col_legend_place = NULL,
col_legend_ncol = NULL,
col_legend_nrow = NULL,
col_legend_rev = FALSE,
col_limits = NULL,
col_oob = scales::oob_keep,
col_rescale = scales::rescale(),
col_title = NULL,
col_trans = "identity",
facet_labels = NULL,
facet_ncol = NULL,
facet_nrow = NULL,
facet_scales = "fixed",
facet_space = "fixed",
facet_layout = NULL,
facet_switch = NULL,
linetype_title = NULL,
shape_title = NULL,
size_title = NULL,
caption = NULL,
titles = snakecase::to_sentence_case,
theme = NULL
)

```

Arguments

data	A data frame or tibble.
x	Unquoted x aesthetic variable.

<code>y</code>	Unquoted y aesthetic variable.
<code>col</code>	Unquoted col and fill aesthetic variable.
<code>facet</code>	Unquoted facet aesthetic variable.
<code>facet2</code>	Unquoted second facet variable.
<code>group</code>	Unquoted group aesthetic variable.
<code>text</code>	Unquoted text aesthetic variable.
<code>mapping</code>	Map additional aesthetics using the <code>ggplot2::aes</code> function (e.g. <code>shape</code>). Excludes colour, fill or alpha.
<code>stat</code>	A <code>ggplot2</code> character string stat.
<code>position</code>	Position adjustment. Either a character string (e.g. <code>"identity"</code>), or a function (e.g. <code>ggplot2::position_identity()</code>).
<code>coord</code>	A coordinate function from <code>ggplot2</code> (e.g. <code>ggplot2::coord_cartesian(clip = "off")</code>).
<code>pal</code>	Colours to use. A character vector of hex codes (or names).
<code>pal_na</code>	Colour to use for NA values. A character vector of a hex code (or name).
<code>alpha</code>	Opacity. A number between 0 and 1.
<code>...</code>	Other arguments passed to the <code>ggplot2::geom_bar</code> function.
<code>title</code>	Title string.
<code>subtitle</code>	Subtitle string.
<code>x_breaks</code>	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
<code>x_expand</code>	Padding to the limits with the <code>ggplot2::expansion</code> function, or a vector of length 2 (e.g. <code>c(0, 0)</code>).
<code>x_gridlines</code>	TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.
<code>x_include</code>	For a continuous x variable, any values that the limits should encompass (e.g. 0).
<code>x_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
<code>x_limits</code>	A vector of length 2 to determine the limits of the axis.
<code>x_oob</code>	For a continuous x variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
<code>x_sec_axis</code>	A secondary axis using the <code>ggplot2::sec_axis</code> or <code>ggplot2::dup_axis</code> function.
<code>x_title</code>	Axis title string. Use "" for no title.
<code>x_trans</code>	For a numeric x variable, a transformation object (e.g. <code>"log10"</code> , <code>"sqrt"</code> or <code>"reverse"</code>).
<code>y_breaks</code>	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
<code>y_expand</code>	Padding to the limits with the <code>ggplot2::expansion</code> function, or a vector of length 2 (e.g. <code>c(0, 0)</code>).
<code>y_gridlines</code>	TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.

<code>y_include</code>	For a continuous y variable, any values that the limits should encompass (e.g. 0).
<code>y_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
<code>y_limits</code>	A vector of length 2 to determine the limits of the axis.
<code>y_oob</code>	For a continuous y variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
<code>y_sec_axis</code>	A secondary axis using the <code>ggplot2::sec_axis</code> or <code>ggplot2::dup_axis</code> function.
<code>y_title</code>	Axis title string. Use "" for no title.
<code>y_trans</code>	For a numeric y variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
<code>col_breaks</code>	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
<code>col_continuous</code>	For a continuous col variable, the type of colouring. Either "gradient" or "steps". Defaults to "gradient".
<code>col_include</code>	For a continuous col variable, any values that the limits should encompass (e.g. 0).
<code>col_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
<code>col_legend_place</code>	The place for the legend. Either "bottom", "right", "top" or "left". Or just the first letter of each.
<code>col_legend_ncol</code>	The number of columns for the legend elements.
<code>col_legend_nrow</code>	The number of rows for the legend elements.
<code>col_legend_rev</code>	Reverse the elements of the legend. Defaults to FALSE.
<code>col_limits</code>	A vector to determine the limits of the colour scale.
<code>col_oob</code>	For a continuous col variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
<code>col_rescale</code>	For a continuous col variable, a <code>scales::rescale</code> function.
<code>col_title</code>	Legend title string. Use "" for no title.
<code>col_trans</code>	For a numeric col variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
<code>facet_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a named vector of labels (e.g. <code>c("value" = "label", ...)</code>).
<code>facet_ncol</code>	The number of columns of facets. Only applies to a facet layout of "wrap".
<code>facet_nrow</code>	The number of rows of facets. Only applies to a facet layout of "wrap".
<code>facet_scales</code>	Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
<code>facet_space</code>	Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".

facet_layout	Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or facet2) argument is provided, then defaults to "wrap". If NULL and both facet and facet2 arguments are provided, defaults to "grid".
facet_switch	Whether the facet layout is "grid", whether to switch the facet labels to the opposite side of the plot. Either "x", "y" or "both".
linetype_title	Legend title string. Use "" for no title.
shape_title	Legend title string. Use "" for no title.
size_title	Legend title string. Use "" for no title.
caption	Caption title string.
titles	A function to format unspecified titles. Defaults to snakecase::to_sentence_case.
theme	A ggplot2 theme.

Value

A ggplot object.

Examples

```
library(dplyr)
library(palmerpenguins)

penguins |>
  group_by(sex, species) |>
  summarise(flipper_length_mm = mean(flipper_length_mm, na.rm = TRUE)) |>
  tidyr::drop_na(sex) |>
  mutate(species = stringr::str_to_sentence(species)) |>
  gg_col(
    x = flipper_length_mm,
    y = species,
    col = sex,
    width = 0.75,
    position = "dodge",
    pal = c("#1B9E77", "#9E361B")
  )
```

gg_contour

Contour ggplot

Description

Create a contour ggplot with a wrapper around ggplot2::geom_contour(stat = "contour", ...).

Usage

```
gg_contour(  
  data = NULL,  
  x = NULL,  
  y = NULL,  
  z = NULL,  
  facet = NULL,  
  facet2 = NULL,  
  group = NULL,  
  text = NULL,  
  position = "identity",  
  mapping = NULL,  
  stat = "contour",  
  coord = ggplot2::coord_cartesian(clip = "off"),  
  pal = NULL,  
  pal_na = pal_grey,  
  alpha = 1,  
  ...,  
  title = NULL,  
  subtitle = NULL,  
  x_breaks = NULL,  
  x_expand = NULL,  
  x_gridlines = NULL,  
  x_include = NULL,  
  x_labels = NULL,  
  x_limits = NULL,  
  x_oob = scales::oob_keep,  
  x_sec_axis = ggplot2::waiver(),  
  x_title = NULL,  
  x_trans = "identity",  
  y_breaks = NULL,  
  y_expand = NULL,  
  y_gridlines = NULL,  
  y_include = NULL,  
  y_labels = NULL,  
  y_limits = NULL,  
  y_oob = scales::oob_keep,  
  y_sec_axis = ggplot2::waiver(),  
  y_title = NULL,  
  y_trans = "identity",  
  facet_labels = NULL,  
  facet_ncol = NULL,  
  facet_nrow = NULL,  
  facet_scales = "fixed",  
  facet_space = "fixed",  
  facet_layout = NULL,  
  facet_switch = NULL,  
  linetype_title = NULL,
```



```

    shape_title = NULL,
    size_title = NULL,
    caption = NULL,
    titles = snakecase::to_sentence_case,
    theme = NULL
  )

```

Arguments

<code>data</code>	A data frame or tibble.
<code>x</code>	Unquoted x aesthetic variable.
<code>y</code>	Unquoted y aesthetic variable.
<code>z</code>	Unquoted z aesthetic variable.
<code>facet</code>	Unquoted facet aesthetic variable.
<code>facet2</code>	Unquoted second facet variable.
<code>group</code>	Unquoted group aesthetic variable.
<code>text</code>	Unquoted text aesthetic variable.
<code>position</code>	Position adjustment. Either a character string (e.g. "identity"), or a function (e.g. <code>ggplot2::position_identity()</code>).
<code>mapping</code>	Map additional aesthetics using the <code>ggplot2::aes</code> function (e.g. <code>shape</code>). Excludes colour, fill or alpha.
<code>stat</code>	A <code>ggplot2</code> character string stat.
<code>coord</code>	A coordinate function from <code>ggplot2</code> (e.g. <code>ggplot2::coord_cartesian(clip = "off")</code>).
<code>pal</code>	Colours to use. A character vector of hex codes (or names).
<code>pal_na</code>	Colour to use for NA values. A character vector of a hex code (or name).
<code>alpha</code>	Opacity. A number between 0 and 1.
<code>...</code>	Other arguments passed to the <code>ggplot2::geom_contour</code> function.
<code>title</code>	Title string.
<code>subtitle</code>	Subtitle string.
<code>x_breaks</code>	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
<code>x_expand</code>	Padding to the limits with the <code>ggplot2::expansion</code> function, or a vector of length 2 (e.g. <code>c(0, 0)</code>).
<code>x_gridlines</code>	TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.
<code>x_include</code>	For a continuous x variable, any values that the limits should encompass (e.g. 0).
<code>x_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
<code>x_limits</code>	A vector of length 2 to determine the limits of the axis.
<code>x_oob</code>	For a continuous x variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .

<code>x_sec_axis</code>	A secondary axis using the <code>ggplot2::sec_axis</code> or <code>ggplot2::dup_axis</code> function.
<code>x_title</code>	Axis title string. Use "" for no title.
<code>x_trans</code>	For a numeric x variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
<code>y_breaks</code>	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
<code>y_expand</code>	Padding to the limits with the <code>ggplot2::expansion</code> function, or a vector of length 2 (e.g. <code>c(0, 0)</code>).
<code>y_gridlines</code>	TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.
<code>y_include</code>	For a continuous y variable, any values that the limits should encompass (e.g. 0).
<code>y_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
<code>y_limits</code>	A vector of length 2 to determine the limits of the axis.
<code>y_oob</code>	For a continuous y variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
<code>y_sec_axis</code>	A secondary axis using the <code>ggplot2::sec_axis</code> or <code>ggplot2::dup_axis</code> function.
<code>y_title</code>	Axis title string. Use "" for no title.
<code>y_trans</code>	For a numeric y variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
<code>facet_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a named vector of labels (e.g. <code>c("value" = "label", ...)</code>).
<code>facet_ncol</code>	The number of columns of facets. Only applies to a facet layout of "wrap".
<code>facet_nrow</code>	The number of rows of facets. Only applies to a facet layout of "wrap".
<code>facet_scales</code>	Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
<code>facet_space</code>	Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".
<code>facet_layout</code>	Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or <code>facet2</code>) argument is provided, then defaults to "wrap". If NULL and both <code>facet</code> and <code>facet2</code> arguments are provided, defaults to "grid".
<code>facet_switch</code>	Whether the facet layout is "grid", whether to switch the facet labels to the opposite side of the plot. Either "x", "y" or "both".
<code>linetype_title</code>	Legend title string. Use "" for no title.
<code>shape_title</code>	Legend title string. Use "" for no title.
<code>size_title</code>	Legend title string. Use "" for no title.
<code>caption</code>	Caption title string.
<code>titles</code>	A function to format unspecified titles. Defaults to <code>snakecase::to_sentence_case</code> .
<code>theme</code>	A <code>ggplot2</code> theme.

Value

A ggplot object.

Examples

```
library(ggplot2)

faithfuld |>
  gg_contour(
    x = waiting,
    y = eruptions,
    z = density,
    bins = 8
  )

# add a colour aesthetic with gg_blank
faithfuld |>
  gg_blank(
    x = waiting,
    y = eruptions,
    z = density,
    stat = "contour",
    bins = 8) +
  geom_contour(aes(colour = after_stat(level)), bins = 8) +
  labs(colour = "Level")
```

gg_contour_filled *Contour_filled ggplot*

Description

Create a `contour_filled` ggplot with a wrapper around `ggplot2::geom_contour_filled(stat = "contour_filled", ...)`.

Usage

```
gg_contour_filled(
  data = NULL,
  x = NULL,
  y = NULL,
  z = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  text = NULL,
  position = "identity",
  mapping = NULL,
```

```
stat = "contour_filled",
coord = ggplot2::coord_cartesian(clip = "off"),
pal = NULL,
pal_na = pal_grey,
alpha = 1,
...,
title = NULL,
subtitle = NULL,
x_breaks = NULL,
x_expand = c(0, 0),
x_gridlines = NULL,
x_include = NULL,
x_labels = NULL,
x_limits = c(NA, NA),
x_oob = scales::oob_keep,
x_sec_axis = ggplot2::waiver(),
x_title = NULL,
x_trans = "identity",
y_breaks = NULL,
y_expand = c(0, 0),
y_gridlines = NULL,
y_include = NULL,
y_labels = NULL,
y_limits = c(NA, NA),
y_oob = scales::oob_keep,
y_sec_axis = ggplot2::waiver(),
y_title = NULL,
y_trans = "identity",
col_labels = NULL,
col_legend_place = NULL,
col_legend_ncol = NULL,
col_legend_nrow = NULL,
col_legend_rev = FALSE,
col_title = NULL,
facet_labels = NULL,
facet_ncol = NULL,
facet_nrow = NULL,
facet_scales = "fixed",
facet_space = "fixed",
facet_layout = NULL,
facet_switch = NULL,
linetype_title = NULL,
shape_title = NULL,
size_title = NULL,
caption = NULL,
titles = snakecase::to_sentence_case,
theme = NULL
)
```

Arguments

<code>data</code>	A data frame or tibble.
<code>x</code>	Unquoted x aesthetic variable.
<code>y</code>	Unquoted y aesthetic variable.
<code>z</code>	Unquoted z aesthetic variable
<code>facet</code>	Unquoted facet aesthetic variable.
<code>facet2</code>	Unquoted second facet variable.
<code>group</code>	Unquoted group aesthetic variable.
<code>text</code>	Unquoted text aesthetic variable.
<code>position</code>	Position adjustment. Either a character string (e.g. "identity"), or a function (e.g. <code>ggplot2::position_identity()</code>).
<code>mapping</code>	Map additional aesthetics using the <code>ggplot2::aes</code> function (e.g. <code>shape</code>). Excludes colour, fill or alpha.
<code>stat</code>	A <code>ggplot2</code> character string stat.
<code>coord</code>	A coordinate function from <code>ggplot2</code> (e.g. <code>ggplot2::coord_cartesian(clip = "off")</code>).
<code>pal</code>	Colours to use. A character vector of hex codes (or names).
<code>pal_na</code>	Colour to use for NA values. A character vector of a hex code (or name).
<code>alpha</code>	Opacity. A number between 0 and 1.
<code>...</code>	Other arguments passed to the <code>ggplot2::geom_contour_filled</code> function.
<code>title</code>	Title string.
<code>subtitle</code>	Subtitle string.
<code>x_breaks</code>	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
<code>x_expand</code>	Padding to the limits with the <code>ggplot2::expansion</code> function, or a vector of length 2 (e.g. <code>c(0, 0)</code>).
<code>x_gridlines</code>	TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.
<code>x_include</code>	For a continuous x variable, any values that the limits should encompass (e.g. 0).
<code>x_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
<code>x_limits</code>	A vector of length 2 to determine the limits of the axis.
<code>x_oob</code>	For a continuous x variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
<code>x_sec_axis</code>	A secondary axis using the <code>ggplot2::sec_axis</code> or <code>ggplot2::dup_axis</code> function.
<code>x_title</code>	Axis title string. Use "" for no title.
<code>x_trans</code>	For a numeric x variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
<code>y_breaks</code>	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.

<code>y_expand</code>	Padding to the limits with the <code>ggplot2::expansion</code> function, or a vector of length 2 (e.g. <code>c(0, 0)</code>).
<code>y_gridlines</code>	TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.
<code>y_include</code>	For a continuous y variable, any values that the limits should encompass (e.g. 0).
<code>y_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
<code>y_limits</code>	A vector of length 2 to determine the limits of the axis.
<code>y_oob</code>	For a continuous y variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
<code>y_sec_axis</code>	A secondary axis using the <code>ggplot2::sec_axis</code> or <code>ggplot2::dup_axis</code> function.
<code>y_title</code>	Axis title string. Use "" for no title.
<code>y_trans</code>	For a numeric y variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
<code>col_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
<code>col_legend_place</code>	The place for the legend. Either "bottom", "right", "top" or "left". Or just the first letter of each.
<code>col_legend_ncol</code>	The number of columns for the legend elements.
<code>col_legend_nrow</code>	The number of rows for the legend elements.
<code>col_legend_rev</code>	Reverse the elements of the legend. Defaults to FALSE.
<code>col_title</code>	Legend title string. Use "" for no title.
<code>facet_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a named vector of labels (e.g. <code>c("value" = "label", ...)</code>).
<code>facet_ncol</code>	The number of columns of facets. Only applies to a facet layout of "wrap".
<code>facet_nrow</code>	The number of rows of facets. Only applies to a facet layout of "wrap".
<code>facet_scales</code>	Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
<code>facet_space</code>	Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".
<code>facet_layout</code>	Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or facet2) argument is provided, then defaults to "wrap". If NULL and both facet and facet2 arguments are provided, defaults to "grid".
<code>facet_switch</code>	Whether the facet layout is "grid", whether to switch the facet labels to the opposite side of the plot. Either "x", "y" or "both".
<code>linetype_title</code>	Legend title string. Use "" for no title.

shape_title	Legend title string. Use "" for no title.
size_title	Legend title string. Use "" for no title.
caption	Caption title string.
titles	A function to format unspecified titles. Defaults to snakecase::to_sentence_case.
theme	A ggplot2 theme.

Value

A ggplot object.

Examples

```
ggplot2::faithfuld |>
  gg_contour_filled(
    x = waiting,
    y = eruptions,
    z = density,
    bins = 8
  )
```

 gg_crossbar

Crossbar ggplot

Description

Create a crossbar ggplot with a wrapper around ggplot2::geom_crossbar(stat = "identity", ...).

Usage

```
gg_crossbar(
  data = NULL,
  x = NULL,
  xmin = NULL,
  xmax = NULL,
  y = NULL,
  ymin = NULL,
  ymax = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  text = NULL,
  mapping = NULL,
  stat = "identity",
  position = "identity",
  coord = ggplot2::coord_cartesian(clip = "off"),
```

```
pal = NULL,  
pal_na = pal_grey,  
alpha = 0.5,  
...,  
title = NULL,  
subtitle = NULL,  
x_breaks = NULL,  
x_expand = NULL,  
x_gridlines = NULL,  
x_include = NULL,  
x_labels = NULL,  
x_limits = NULL,  
x_oob = scales::oob_keep,  
x_sec_axis = ggplot2::waiver(),  
x_title = NULL,  
x_trans = "identity",  
y_breaks = NULL,  
y_expand = NULL,  
y_gridlines = NULL,  
y_include = NULL,  
y_labels = NULL,  
y_limits = NULL,  
y_oob = scales::oob_keep,  
y_sec_axis = ggplot2::waiver(),  
y_title = NULL,  
y_trans = "identity",  
col_breaks = NULL,  
col_continuous = "gradient",  
col_include = NULL,  
col_labels = NULL,  
col_legend_place = NULL,  
col_legend_ncol = NULL,  
col_legend_nrow = NULL,  
col_legend_rev = FALSE,  
col_limits = NULL,  
col_oob = scales::oob_keep,  
col_rescale = scales::rescale(),  
col_title = NULL,  
col_trans = "identity",  
facet_labels = NULL,  
facet_ncol = NULL,  
facet_nrow = NULL,  
facet_scales = "fixed",  
facet_space = "fixed",  
facet_layout = NULL,  
facet_switch = NULL,  
linetype_title = NULL,  
shape_title = NULL,
```



```

    size_title = NULL,
    caption = NULL,
    titles = snakecase::to_sentence_case,
    theme = NULL
  )

```

Arguments

<code>data</code>	A data frame or tibble.
<code>x</code>	Unquoted x aesthetic variable.
<code>xmin</code>	Unquoted xmin aesthetic variable.
<code>xmax</code>	Unquoted xmax aesthetic variable.
<code>y</code>	Unquoted y aesthetic variable.
<code>ymin</code>	Unquoted ymin aesthetic variable.
<code>ymax</code>	Unquoted ymax aesthetic variable.
<code>col</code>	Unquoted col and fill aesthetic variable.
<code>facet</code>	Unquoted facet aesthetic variable.
<code>facet2</code>	Unquoted second facet variable.
<code>group</code>	Unquoted group aesthetic variable.
<code>text</code>	Unquoted text aesthetic variable.
<code>mapping</code>	Map additional aesthetics using the <code>ggplot2::aes</code> function (e.g. <code>shape</code>). Excludes colour, fill or alpha.
<code>stat</code>	A <code>ggplot2</code> character string stat.
<code>position</code>	Position adjustment. Either a character string (e.g. <code>"identity"</code>), or a function (e.g. <code>ggplot2::position_identity()</code>).
<code>coord</code>	A coordinate function from <code>ggplot2</code> (e.g. <code>ggplot2::coord_cartesian(clip = "off")</code>).
<code>pal</code>	Colours to use. A character vector of hex codes (or names).
<code>pal_na</code>	Colour to use for NA values. A character vector of a hex code (or name).
<code>alpha</code>	Opacity. A number between 0 and 1.
<code>...</code>	Other arguments passed to the <code>ggplot2::geom_crossbar</code> function.
<code>title</code>	Title string.
<code>subtitle</code>	Subtitle string.
<code>x_breaks</code>	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
<code>x_expand</code>	Padding to the limits with the <code>ggplot2::expansion</code> function, or a vector of length 2 (e.g. <code>c(0, 0)</code>).
<code>x_gridlines</code>	TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.
<code>x_include</code>	For a continuous x variable, any values that the limits should encompass (e.g. 0).
<code>x_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.

<code>x_limits</code>	A vector of length 2 to determine the limits of the axis.
<code>x_oob</code>	For a continuous x variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
<code>x_sec_axis</code>	A secondary axis using the <code>ggplot2::sec_axis</code> or <code>ggplot2::dup_axis</code> function.
<code>x_title</code>	Axis title string. Use "" for no title.
<code>x_trans</code>	For a numeric x variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
<code>y_breaks</code>	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
<code>y_expand</code>	Padding to the limits with the <code>ggplot2::expansion</code> function, or a vector of length 2 (e.g. <code>c(0, 0)</code>).
<code>y_gridlines</code>	TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.
<code>y_include</code>	For a continuous y variable, any values that the limits should encompass (e.g. 0).
<code>y_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
<code>y_limits</code>	A vector of length 2 to determine the limits of the axis.
<code>y_oob</code>	For a continuous y variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
<code>y_sec_axis</code>	A secondary axis using the <code>ggplot2::sec_axis</code> or <code>ggplot2::dup_axis</code> function.
<code>y_title</code>	Axis title string. Use "" for no title.
<code>y_trans</code>	For a numeric y variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
<code>col_breaks</code>	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
<code>col_continuous</code>	For a continuous col variable, the type of colouring. Either "gradient" or "steps". Defaults to "gradient".
<code>col_include</code>	For a continuous col variable, any values that the limits should encompass (e.g. 0).
<code>col_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
<code>col_legend_place</code>	The place for the legend. Either "bottom", "right", "top" or "left". Or just the first letter of each.
<code>col_legend_ncol</code>	The number of columns for the legend elements.
<code>col_legend_nrow</code>	The number of rows for the legend elements.
<code>col_legend_rev</code>	Reverse the elements of the legend. Defaults to FALSE.
<code>col_limits</code>	A vector to determine the limits of the colour scale.
<code>col_oob</code>	For a continuous col variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .

col_rescale	For a continuous col variable, a scales::rescale function.
col_title	Legend title string. Use "" for no title.
col_trans	For a numeric col variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
facet_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a named vector of labels (e.g. c("value" = "label", ...)).
facet_ncol	The number of columns of facets. Only applies to a facet layout of "wrap".
facet_nrow	The number of rows of facets. Only applies to a facet layout of "wrap".
facet_scales	Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
facet_space	Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".
facet_layout	Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or facet2) argument is provided, then defaults to "wrap". If NULL and both facet and facet2 arguments are provided, defaults to "grid".
facet_switch	Whether the facet layout is "grid", whether to switch the facet labels to the opposite side of the plot. Either "x", "y" or "both".
linetype_title	Legend title string. Use "" for no title.
shape_title	Legend title string. Use "" for no title.
size_title	Legend title string. Use "" for no title.
caption	Caption title string.
titles	A function to format unspecified titles. Defaults to snakecase::to_sentence_case.
theme	A ggplot2 theme.

Value

A ggplot object.

Examples

```
library(dplyr)
library(palmerpenguins)

data.frame(
  trt = factor(c(1, 1, 2, 2)),
  resp = c(1, 5, 3, 4),
  group = factor(c(1, 2, 1, 2)),
  upper = c(1.1, 5.3, 3.3, 4.2),
  lower = c(0.8, 4.6, 2.4, 3.6)
) |>
gg_crossbar(
  x = trt,
  y = resp,
```

```
ymin = lower,  
ymax = upper,  
col = group,  
width = 0.5,  
x_title = "Treatment",  
y_title = "Response",  
pal = c("#1B9E77", "#9E361B")  
)
```

gg_density

Density ggplot

Description

Create a density ggplot with a wrapper around `ggplot2::geom_density(stat = "density", ...)`.

Usage

```
gg_density(  
  data = NULL,  
  x = NULL,  
  y = NULL,  
  col = NULL,  
  facet = NULL,  
  facet2 = NULL,  
  group = NULL,  
  text = NULL,  
  mapping = NULL,  
  stat = "density",  
  position = "identity",  
  coord = ggplot2::coord_cartesian(clip = "off"),  
  pal = NULL,  
  pal_na = pal_grey,  
  alpha = 0.5,  
  ...,  
  title = NULL,  
  subtitle = NULL,  
  x_breaks = NULL,  
  x_expand = NULL,  
  x_gridlines = NULL,  
  x_include = NULL,  
  x_labels = NULL,  
  x_limits = NULL,  
  x_oob = scales::oob_keep,  
  x_sec_axis = ggplot2::waiver(),  
  x_title = NULL,  
  x_trans = "identity",
```

```

y_breaks = NULL,
y_expand = NULL,
y_gridlines = NULL,
y_include = NULL,
y_labels = NULL,
y_limits = NULL,
y_oob = scales::oob_keep,
y_sec_axis = ggplot2::waiver(),
y_title = NULL,
y_trans = "identity",
col_breaks = NULL,
col_continuous = "gradient",
col_include = NULL,
col_labels = NULL,
col_legend_place = NULL,
col_legend_ncol = NULL,
col_legend_nrow = NULL,
col_legend_rev = FALSE,
col_limits = NULL,
col_oob = scales::oob_keep,
col_rescale = scales::rescale(),
col_title = NULL,
col_trans = "identity",
facet_labels = NULL,
facet_ncol = NULL,
facet_nrow = NULL,
facet_scales = "fixed",
facet_space = "fixed",
facet_layout = NULL,
facet_switch = NULL,
linetype_title = NULL,
shape_title = NULL,
size_title = NULL,
caption = NULL,
titles = snakecase::to_sentence_case,
theme = NULL
)

```

Arguments

data	A data frame or tibble.
x	Unquoted x aesthetic variable.
y	Unquoted y aesthetic variable.
col	Unquoted col and fill aesthetic variable.
facet	Unquoted facet aesthetic variable.
facet2	Unquoted second facet variable.
group	Unquoted group aesthetic variable.

text	Unquoted text aesthetic variable.
mapping	Map additional aesthetics using the <code>ggplot2::aes</code> function (e.g. <code>shape</code>). Excludes colour, fill or alpha.
stat	A <code>ggplot2</code> character string stat.
position	Position adjustment. Either a character string (e.g. <code>"identity"</code>), or a function (e.g. <code>ggplot2::position_identity()</code>).
coord	A coordinate function from <code>ggplot2</code> (e.g. <code>ggplot2::coord_cartesian(clip = "off")</code>).
pal	Colours to use. A character vector of hex codes (or names).
pal_na	Colour to use for NA values. A character vector of a hex code (or name).
alpha	Opacity. A number between 0 and 1.
...	Other arguments passed to the <code>ggplot2::geom_density</code> function.
title	Title string.
subtitle	Subtitle string.
x_breaks	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
x_expand	Padding to the limits with the <code>ggplot2::expansion</code> function, or a vector of length 2 (e.g. <code>c(0, 0)</code>).
x_gridlines	TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.
x_include	For a continuous x variable, any values that the limits should encompass (e.g. 0).
x_labels	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
x_limits	A vector of length 2 to determine the limits of the axis.
x_oob	For a continuous x variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
x_sec_axis	A secondary axis using the <code>ggplot2::sec_axis</code> or <code>ggplot2::dup_axis</code> function.
x_title	Axis title string. Use "" for no title.
x_trans	For a numeric x variable, a transformation object (e.g. <code>"log10"</code> , <code>"sqrt"</code> or <code>"reverse"</code>).
y_breaks	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
y_expand	Padding to the limits with the <code>ggplot2::expansion</code> function, or a vector of length 2 (e.g. <code>c(0, 0)</code>).
y_gridlines	TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.
y_include	For a continuous y variable, any values that the limits should encompass (e.g. 0).
y_labels	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
y_limits	A vector of length 2 to determine the limits of the axis.
y_oob	For a continuous y variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .

<code>y_sec_axis</code>	A secondary axis using the <code>ggplot2::sec_axis</code> or <code>ggplot2::dup_axis</code> function.
<code>y_title</code>	Axis title string. Use "" for no title.
<code>y_trans</code>	For a numeric y variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
<code>col_breaks</code>	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
<code>col_continuous</code>	For a continuous col variable, the type of colouring. Either "gradient" or "steps". Defaults to "gradient".
<code>col_include</code>	For a continuous col variable, any values that the limits should encompass (e.g. 0).
<code>col_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
<code>col_legend_place</code>	The place for the legend. Either "bottom", "right", "top" or "left". Or just the first letter of each.
<code>col_legend_ncol</code>	The number of columns for the legend elements.
<code>col_legend_nrow</code>	The number of rows for the legend elements.
<code>col_legend_rev</code>	Reverse the elements of the legend. Defaults to FALSE.
<code>col_limits</code>	A vector to determine the limits of the colour scale.
<code>col_oob</code>	For a continuous col variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
<code>col_rescale</code>	For a continuous col variable, a <code>scales::rescale</code> function.
<code>col_title</code>	Legend title string. Use "" for no title.
<code>col_trans</code>	For a numeric col variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
<code>facet_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a named vector of labels (e.g. <code>c("value" = "label", ...)</code>).
<code>facet_ncol</code>	The number of columns of facets. Only applies to a facet layout of "wrap".
<code>facet_nrow</code>	The number of rows of facets. Only applies to a facet layout of "wrap".
<code>facet_scales</code>	Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
<code>facet_space</code>	Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".
<code>facet_layout</code>	Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or <code>facet2</code>) argument is provided, then defaults to "wrap". If NULL and both <code>facet</code> and <code>facet2</code> arguments are provided, defaults to "grid".
<code>facet_switch</code>	Whether the facet layout is "grid", whether to switch the facet labels to the opposite side of the plot. Either "x", "y" or "both".
<code>linetype_title</code>	Legend title string. Use "" for no title.

shape_title	Legend title string. Use "" for no title.
size_title	Legend title string. Use "" for no title.
caption	Caption title string.
titles	A function to format unspecified titles. Defaults to snakecase::to_sentence_case.
theme	A ggplot2 theme.

Value

A ggplot object.

Examples

```
library(dplyr)
library(palmerpenguins)

penguins |>
  tidyr::drop_na(sex) |>
  gg_density(
    x = flipper_length_mm,
    col = sex,
    facet = species,
    pal = c("#1B9E77", "#9E361B"),
    col_labels = stringr::str_to_sentence
  )
```

 gg_density_2d

Density_2d ggplot

Description

Create a density_2d ggplot with a wrapper around ggplot2::geom_density_2d(stat = "density_2d", ...).

Usage

```
gg_density_2d(
  data = NULL,
  x = NULL,
  y = NULL,
  z = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  text = NULL,
  mapping = NULL,
  stat = "density_2d",
```



```

position = "identity",
coord = ggplot2::coord_cartesian(clip = "off"),
pal = NULL,
pal_na = pal_grey,
alpha = 1,
...,
title = NULL,
subtitle = NULL,
x_breaks = NULL,
x_expand = NULL,
x_gridlines = NULL,
x_include = NULL,
x_labels = NULL,
x_limits = NULL,
x_oob = scales::oob_keep,
x_sec_axis = ggplot2::waiver(),
x_title = NULL,
x_trans = "identity",
y_breaks = NULL,
y_expand = NULL,
y_gridlines = NULL,
y_include = NULL,
y_labels = NULL,
y_limits = NULL,
y_oob = scales::oob_keep,
y_sec_axis = ggplot2::waiver(),
y_title = NULL,
y_trans = "identity",
facet_labels = NULL,
facet_ncol = NULL,
facet_nrow = NULL,
facet_scales = "fixed",
facet_space = "fixed",
facet_layout = NULL,
facet_switch = NULL,
linetype_title = NULL,
shape_title = NULL,
size_title = NULL,
caption = NULL,
titles = snakecase::to_sentence_case,
theme = NULL
)

```

Arguments

<code>data</code>	A data frame or tibble.
<code>x</code>	Unquoted x aesthetic variable.
<code>y</code>	Unquoted y aesthetic variable.

<code>z</code>	Unquoted <code>z</code> aesthetic variable
<code>facet</code>	Unquoted facet aesthetic variable.
<code>facet2</code>	Unquoted second facet variable.
<code>group</code>	Unquoted group aesthetic variable.
<code>text</code>	Unquoted text aesthetic variable.
<code>mapping</code>	Map additional aesthetics using the <code>ggplot2::aes</code> function (e.g. <code>shape</code>). Excludes colour, fill or alpha.
<code>stat</code>	A <code>ggplot2</code> character string stat.
<code>position</code>	Position adjustment. Either a character string (e.g. <code>"identity"</code>), or a function (e.g. <code>ggplot2::position_identity()</code>).
<code>coord</code>	A coordinate function from <code>ggplot2</code> (e.g. <code>ggplot2::coord_cartesian(clip = "off")</code>).
<code>pal</code>	Colours to use. A character vector of hex codes (or names).
<code>pal_na</code>	Colour to use for NA values. A character vector of a hex code (or name).
<code>alpha</code>	Opacity. A number between 0 and 1.
<code>...</code>	Other arguments passed to the <code>ggplot2::geom_density_2d</code> function.
<code>title</code>	Title string.
<code>subtitle</code>	Subtitle string.
<code>x_breaks</code>	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
<code>x_expand</code>	Padding to the limits with the <code>ggplot2::expansion</code> function, or a vector of length 2 (e.g. <code>c(0, 0)</code>).
<code>x_gridlines</code>	TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.
<code>x_include</code>	For a continuous x variable, any values that the limits should encompass (e.g. 0).
<code>x_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
<code>x_limits</code>	A vector of length 2 to determine the limits of the axis.
<code>x_oob</code>	For a continuous x variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
<code>x_sec_axis</code>	A secondary axis using the <code>ggplot2::sec_axis</code> or <code>ggplot2::dup_axis</code> function.
<code>x_title</code>	Axis title string. Use <code>""</code> for no title.
<code>x_trans</code>	For a numeric x variable, a transformation object (e.g. <code>"log10"</code> , <code>"sqrt"</code> or <code>"reverse"</code>).
<code>y_breaks</code>	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
<code>y_expand</code>	Padding to the limits with the <code>ggplot2::expansion</code> function, or a vector of length 2 (e.g. <code>c(0, 0)</code>).
<code>y_gridlines</code>	TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.
<code>y_include</code>	For a continuous y variable, any values that the limits should encompass (e.g. 0).

<code>y_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
<code>y_limits</code>	A vector of length 2 to determine the limits of the axis.
<code>y_oob</code>	For a continuous y variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
<code>y_sec_axis</code>	A secondary axis using the <code>ggplot2::sec_axis</code> or <code>ggplot2::dup_axis</code> function.
<code>y_title</code>	Axis title string. Use "" for no title.
<code>y_trans</code>	For a numeric y variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
<code>facet_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a named vector of labels (e.g. <code>c("value" = "label", ...)</code>).
<code>facet_ncol</code>	The number of columns of facets. Only applies to a facet layout of "wrap".
<code>facet_nrow</code>	The number of rows of facets. Only applies to a facet layout of "wrap".
<code>facet_scales</code>	Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
<code>facet_space</code>	Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".
<code>facet_layout</code>	Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or <code>facet2</code>) argument is provided, then defaults to "wrap". If NULL and both <code>facet</code> and <code>facet2</code> arguments are provided, defaults to "grid".
<code>facet_switch</code>	Whether the facet layout is "grid", whether to switch the facet labels to the opposite side of the plot. Either "x", "y" or "both".
<code>linetype_title</code>	Legend title string. Use "" for no title.
<code>shape_title</code>	Legend title string. Use "" for no title.
<code>size_title</code>	Legend title string. Use "" for no title.
<code>caption</code>	Caption title string.
<code>titles</code>	A function to format unspecified titles. Defaults to <code>snakecase::to_sentence_case</code> .
<code>theme</code>	A <code>ggplot2</code> theme.

Value

A `ggplot` object.

Examples

```
library(ggplot2)

faithful |>
  gg_density_2d(
    x = waiting,
    y = eruptions,
    bins = 8,
```

```

)

# add a colour aesthetic with gg_blank
faithful |>
  gg_blank(
    x = waiting,
    y = eruptions,
    stat = "density_2d",
    bins = 8) +
  geom_density_2d(aes(colour = after_stat(level)), bins = 8) +
  labs(colour = "Level")

```

gg_density_2d_filled *Density_2d_filled* ggplot

Description

Create a `density_2d_filled` ggplot with a wrapper around `ggplot2::geom_density_2d_filled(stat = "density_2d_filled", ...)`.

Usage

```

gg_density_2d_filled(
  data = NULL,
  x = NULL,
  y = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  text = NULL,
  mapping = NULL,
  stat = "density_2d_filled",
  position = "identity",
  coord = ggplot2::coord_cartesian(clip = "off"),
  pal = NULL,
  pal_na = pal_grey,
  alpha = 1,
  ...,
  title = NULL,
  subtitle = NULL,
  x_breaks = NULL,
  x_expand = c(0, 0),
  x_gridlines = NULL,
  x_include = NULL,
  x_labels = NULL,
  x_limits = c(NA, NA),
  x_oob = scales::oob_keep,

```

```

x_sec_axis = ggplot2::waiver(),
x_title = NULL,
x_trans = "identity",
y_breaks = NULL,
y_expand = c(0, 0),
y_gridlines = NULL,
y_include = NULL,
y_labels = NULL,
y_limits = c(NA, NA),
y_oob = scales::oob_keep,
y_sec_axis = ggplot2::waiver(),
y_title = NULL,
y_trans = "identity",
col_labels = NULL,
col_legend_place = NULL,
col_legend_ncol = NULL,
col_legend_nrow = NULL,
col_legend_rev = FALSE,
col_title = NULL,
facet_labels = NULL,
facet_ncol = NULL,
facet_nrow = NULL,
facet_scales = "fixed",
facet_space = "fixed",
facet_layout = NULL,
facet_switch = NULL,
linetype_title = NULL,
shape_title = NULL,
size_title = NULL,
caption = NULL,
titles = snakecase::to_sentence_case,
theme = NULL
)

```

Arguments

<code>data</code>	A data frame or tibble.
<code>x</code>	Unquoted x aesthetic variable.
<code>y</code>	Unquoted y aesthetic variable.
<code>facet</code>	Unquoted facet aesthetic variable.
<code>facet2</code>	Unquoted second facet variable.
<code>group</code>	Unquoted group aesthetic variable.
<code>text</code>	Unquoted text aesthetic variable.
<code>mapping</code>	Map additional aesthetics using the <code>ggplot2::aes</code> function (e.g. <code>shape</code>). Excludes colour, fill or alpha.
<code>stat</code>	A ggplot2 character string stat.

<code>position</code>	Position adjustment. Either a character string (e.g. "identity"), or a function (e.g. <code>ggplot2::position_identity()</code>).
<code>coord</code>	A coordinate function from <code>ggplot2</code> (e.g. <code>ggplot2::coord_cartesian(clip = "off")</code>).
<code>pal</code>	Colours to use. A character vector of hex codes (or names).
<code>pal_na</code>	Colour to use for NA values. A character vector of a hex code (or name).
<code>alpha</code>	Opacity. A number between 0 and 1.
<code>...</code>	Other arguments passed to the <code>ggplot2::geom_density_2d_filled</code> function.
<code>title</code>	Title string.
<code>subtitle</code>	Subtitle string.
<code>x_breaks</code>	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
<code>x_expand</code>	Padding to the limits with the <code>ggplot2::expansion</code> function, or a vector of length 2 (e.g. <code>c(0, 0)</code>).
<code>x_gridlines</code>	TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.
<code>x_include</code>	For a continuous x variable, any values that the limits should encompass (e.g. 0).
<code>x_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
<code>x_limits</code>	A vector of length 2 to determine the limits of the axis.
<code>x_oob</code>	For a continuous x variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
<code>x_sec_axis</code>	A secondary axis using the <code>ggplot2::sec_axis</code> or <code>ggplot2::dup_axis</code> function.
<code>x_title</code>	Axis title string. Use "" for no title.
<code>x_trans</code>	For a numeric x variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
<code>y_breaks</code>	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
<code>y_expand</code>	Padding to the limits with the <code>ggplot2::expansion</code> function, or a vector of length 2 (e.g. <code>c(0, 0)</code>).
<code>y_gridlines</code>	TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.
<code>y_include</code>	For a continuous y variable, any values that the limits should encompass (e.g. 0).
<code>y_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
<code>y_limits</code>	A vector of length 2 to determine the limits of the axis.
<code>y_oob</code>	For a continuous y variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
<code>y_sec_axis</code>	A secondary axis using the <code>ggplot2::sec_axis</code> or <code>ggplot2::dup_axis</code> function.
<code>y_title</code>	Axis title string. Use "" for no title.
<code>y_trans</code>	For a numeric y variable, a transformation object (e.g. "log10", "sqrt" or "reverse").

col_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
col_legend_place	The place for the legend. Either "bottom", "right", "top" or "left". Or just the first letter of each.
col_legend_ncol	The number of columns for the legend elements.
col_legend_nrow	The number of rows for the legend elements.
col_legend_rev	Reverse the elements of the legend. Defaults to FALSE.
col_title	Legend title string. Use "" for no title.
facet_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a named vector of labels (e.g. c("value" = "label", ...)).
facet_ncol	The number of columns of facets. Only applies to a facet layout of "wrap".
facet_nrow	The number of rows of facets. Only applies to a facet layout of "wrap".
facet_scales	Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
facet_space	Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".
facet_layout	Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or facet2) argument is provided, then defaults to "wrap". If NULL and both facet and facet2 arguments are provided, defaults to "grid".
facet_switch	Whether the facet layout is "grid", whether to switch the facet labels to the opposite side of the plot. Either "x", "y" or "both".
linetype_title	Legend title string. Use "" for no title.
shape_title	Legend title string. Use "" for no title.
size_title	Legend title string. Use "" for no title.
caption	Caption title string.
titles	A function to format unspecified titles. Defaults to snakecase::to_sentence_case.
theme	A ggplot2 theme.

Value

A ggplot object.

Examples

```
faithful |>
  gg_density_2d_filled(
    x = waiting,
    y = eruptions,
    bins = 8
  )
```

`gg_errorbar`*Errorbar ggplot*

Description

Create a errorbar ggplot with a wrapper around `ggplot2::geom_errorbar(stat = "identity", ...)`.

Usage

```
gg_errorbar(  
  data = NULL,  
  x = NULL,  
  xmin = NULL,  
  xmax = NULL,  
  y = NULL,  
  ymin = NULL,  
  ymax = NULL,  
  col = NULL,  
  facet = NULL,  
  facet2 = NULL,  
  group = NULL,  
  text = NULL,  
  mapping = NULL,  
  stat = "identity",  
  position = "identity",  
  coord = ggplot2::coord_cartesian(clip = "off"),  
  pal = NULL,  
  pal_na = pal_grey,  
  alpha = 1,  
  ...,  
  title = NULL,  
  subtitle = NULL,  
  x_breaks = NULL,  
  x_expand = NULL,  
  x_gridlines = NULL,  
  x_include = NULL,  
  x_labels = NULL,  
  x_limits = NULL,  
  x_oob = scales::oob_keep,  
  x_sec_axis = ggplot2::waiver(),  
  x_title = NULL,  
  x_trans = "identity",  
  y_breaks = NULL,  
  y_expand = NULL,  
  y_gridlines = NULL,  
  y_include = NULL,  
  y_labels = NULL,
```



```

y_limits = NULL,
y_oob = scales::oob_keep,
y_sec_axis = ggplot2::waiver(),
y_title = NULL,
y_trans = "identity",
col_breaks = NULL,
col_continuous = "gradient",
col_include = NULL,
col_labels = NULL,
col_legend_place = NULL,
col_legend_ncol = NULL,
col_legend_nrow = NULL,
col_legend_rev = FALSE,
col_limits = NULL,
col_oob = scales::oob_keep,
col_rescale = scales::rescale(),
col_title = NULL,
col_trans = "identity",
facet_labels = NULL,
facet_ncol = NULL,
facet_nrow = NULL,
facet_scales = "fixed",
facet_space = "fixed",
facet_layout = NULL,
facet_switch = NULL,
linetype_title = NULL,
shape_title = NULL,
size_title = NULL,
caption = NULL,
titles = snakecase::to_sentence_case,
theme = NULL
)

```

Arguments

data	A data frame or tibble.
x	Unquoted x aesthetic variable.
xmin	Unquoted xmin aesthetic variable.
xmax	Unquoted xmax aesthetic variable.
y	Unquoted y aesthetic variable.
ymin	Unquoted ymin aesthetic variable.
ymax	Unquoted ymax aesthetic variable.
col	Unquoted col and fill aesthetic variable.
facet	Unquoted facet aesthetic variable.
facet2	Unquoted second facet variable.
group	Unquoted group aesthetic variable.

<code>text</code>	Unquoted text aesthetic variable.
<code>mapping</code>	Map additional aesthetics using the <code>ggplot2::aes</code> function (e.g. <code>shape</code>). Excludes colour, fill or alpha.
<code>stat</code>	A <code>ggplot2</code> character string stat.
<code>position</code>	Position adjustment. Either a character string (e.g. <code>"identity"</code>), or a function (e.g. <code>ggplot2::position_identity()</code>).
<code>coord</code>	A coordinate function from <code>ggplot2</code> (e.g. <code>ggplot2::coord_cartesian(clip = "off")</code>).
<code>pal</code>	Colours to use. A character vector of hex codes (or names).
<code>pal_na</code>	Colour to use for NA values. A character vector of a hex code (or name).
<code>alpha</code>	Opacity. A number between 0 and 1.
<code>...</code>	Other arguments passed to the <code>ggplot2::geom_errorbar</code> function.
<code>title</code>	Title string.
<code>subtitle</code>	Subtitle string.
<code>x_breaks</code>	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
<code>x_expand</code>	Padding to the limits with the <code>ggplot2::expansion</code> function, or a vector of length 2 (e.g. <code>c(0, 0)</code>).
<code>x_gridlines</code>	TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.
<code>x_include</code>	For a continuous x variable, any values that the limits should encompass (e.g. 0).
<code>x_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
<code>x_limits</code>	A vector of length 2 to determine the limits of the axis.
<code>x_oob</code>	For a continuous x variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
<code>x_sec_axis</code>	A secondary axis using the <code>ggplot2::sec_axis</code> or <code>ggplot2::dup_axis</code> function.
<code>x_title</code>	Axis title string. Use "" for no title.
<code>x_trans</code>	For a numeric x variable, a transformation object (e.g. <code>"log10"</code> , <code>"sqrt"</code> or <code>"reverse"</code>).
<code>y_breaks</code>	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
<code>y_expand</code>	Padding to the limits with the <code>ggplot2::expansion</code> function, or a vector of length 2 (e.g. <code>c(0, 0)</code>).
<code>y_gridlines</code>	TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.
<code>y_include</code>	For a continuous y variable, any values that the limits should encompass (e.g. 0).
<code>y_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
<code>y_limits</code>	A vector of length 2 to determine the limits of the axis.
<code>y_oob</code>	For a continuous y variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .

<code>y_sec_axis</code>	A secondary axis using the <code>ggplot2::sec_axis</code> or <code>ggplot2::dup_axis</code> function.
<code>y_title</code>	Axis title string. Use "" for no title.
<code>y_trans</code>	For a numeric y variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
<code>col_breaks</code>	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
<code>col_continuous</code>	For a continuous col variable, the type of colouring. Either "gradient" or "steps". Defaults to "gradient".
<code>col_include</code>	For a continuous col variable, any values that the limits should encompass (e.g. 0).
<code>col_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
<code>col_legend_place</code>	The place for the legend. Either "bottom", "right", "top" or "left". Or just the first letter of each.
<code>col_legend_ncol</code>	The number of columns for the legend elements.
<code>col_legend_nrow</code>	The number of rows for the legend elements.
<code>col_legend_rev</code>	Reverse the elements of the legend. Defaults to FALSE.
<code>col_limits</code>	A vector to determine the limits of the colour scale.
<code>col_oob</code>	For a continuous col variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
<code>col_rescale</code>	For a continuous col variable, a <code>scales::rescale</code> function.
<code>col_title</code>	Legend title string. Use "" for no title.
<code>col_trans</code>	For a numeric col variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
<code>facet_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a named vector of labels (e.g. <code>c("value" = "label", ...)</code>).
<code>facet_ncol</code>	The number of columns of facets. Only applies to a facet layout of "wrap".
<code>facet_nrow</code>	The number of rows of facets. Only applies to a facet layout of "wrap".
<code>facet_scales</code>	Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
<code>facet_space</code>	Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".
<code>facet_layout</code>	Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or <code>facet2</code>) argument is provided, then defaults to "wrap". If NULL and both <code>facet</code> and <code>facet2</code> arguments are provided, defaults to "grid".
<code>facet_switch</code>	Whether the facet layout is "grid", whether to switch the facet labels to the opposite side of the plot. Either "x", "y" or "both".
<code>linetype_title</code>	Legend title string. Use "" for no title.

shape_title	Legend title string. Use "" for no title.
size_title	Legend title string. Use "" for no title.
caption	Caption title string.
titles	A function to format unspecified titles. Defaults to snakecase::to_sentence_case.
theme	A ggplot2 theme.

Value

A ggplot object.

Examples

```
data.frame(
  trt = factor(c(1, 1, 2, 2)),
  resp = c(1, 5, 3, 4),
  group = factor(c(1, 2, 1, 2)),
  upper = c(1.1, 5.3, 3.3, 4.2),
  lower = c(0.8, 4.6, 2.4, 3.6)
) |>
gg_errorbar(
  x = trt,
  ymin = lower,
  ymax = upper,
  col = group,
  width = 0.1,
  pal = c("#1B9E77", "#9E361B"),
  x_title = "Treatment",
  y_title = "Response",
  position = ggplot2::position_dodge(0.2)
)
```

gg_freqpoly

Freqpoly ggplot

Description

Create a freqpoly ggplot with a wrapper around ggplot2::geom_freqpoly(stat = "bin", ...).

Usage

```
gg_freqpoly(
  data = NULL,
  x = NULL,
  y = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
```

```
group = NULL,  
text = NULL,  
mapping = NULL,  
stat = "bin",  
position = "identity",  
coord = ggplot2::coord_cartesian(clip = "off"),  
pal = NULL,  
pal_na = pal_grey,  
alpha = 1,  
...,  
title = NULL,  
subtitle = NULL,  
x_breaks = NULL,  
x_expand = NULL,  
x_gridlines = NULL,  
x_include = NULL,  
x_labels = NULL,  
x_limits = NULL,  
x_oob = scales::oob_keep,  
x_sec_axis = ggplot2::waiver(),  
x_title = NULL,  
x_trans = "identity",  
y_breaks = NULL,  
y_expand = NULL,  
y_gridlines = NULL,  
y_include = NULL,  
y_labels = NULL,  
y_limits = NULL,  
y_oob = scales::oob_keep,  
y_sec_axis = ggplot2::waiver(),  
y_title = NULL,  
y_trans = "identity",  
col_breaks = NULL,  
col_continuous = "gradient",  
col_include = NULL,  
col_labels = NULL,  
col_legend_place = NULL,  
col_legend_ncol = NULL,  
col_legend_nrow = NULL,  
col_legend_rev = FALSE,  
col_limits = NULL,  
col_oob = scales::oob_keep,  
col_rescale = scales::rescale(),  
col_title = NULL,  
col_trans = "identity",  
facet_labels = NULL,  
facet_ncol = NULL,  
facet_nrow = NULL,
```

```

facet_scales = "fixed",
facet_space = "fixed",
facet_layout = NULL,
facet_switch = NULL,
linetype_title = NULL,
shape_title = NULL,
size_title = NULL,
caption = NULL,
titles = snakecase::to_sentence_case,
theme = NULL
)

```

Arguments

<code>data</code>	A data frame or tibble.
<code>x</code>	Unquoted x aesthetic variable.
<code>y</code>	Unquoted y aesthetic variable.
<code>col</code>	Unquoted col and fill aesthetic variable.
<code>facet</code>	Unquoted facet aesthetic variable.
<code>facet2</code>	Unquoted second facet variable.
<code>group</code>	Unquoted group aesthetic variable.
<code>text</code>	Unquoted text aesthetic variable.
<code>mapping</code>	Map additional aesthetics using the <code>ggplot2::aes</code> function (e.g. <code>shape</code>). Excludes colour, fill or alpha.
<code>stat</code>	A <code>ggplot2</code> character string stat.
<code>position</code>	Position adjustment. Either a character string (e.g. <code>"identity"</code>), or a function (e.g. <code>ggplot2::position_identity()</code>).
<code>coord</code>	A coordinate function from <code>ggplot2</code> (e.g. <code>ggplot2::coord_cartesian(clip = "off")</code>).
<code>pal</code>	Colours to use. A character vector of hex codes (or names).
<code>pal_na</code>	Colour to use for NA values. A character vector of a hex code (or name).
<code>alpha</code>	Opacity. A number between 0 and 1.
<code>...</code>	Other arguments passed to the <code>ggplot2::geom_freqpoly</code> function.
<code>title</code>	Title string.
<code>subtitle</code>	Subtitle string.
<code>x_breaks</code>	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
<code>x_expand</code>	Padding to the limits with the <code>ggplot2::expansion</code> function, or a vector of length 2 (e.g. <code>c(0, 0)</code>).
<code>x_gridlines</code>	TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.
<code>x_include</code>	For a continuous x variable, any values that the limits should encompass (e.g. 0).

<code>x_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
<code>x_limits</code>	A vector of length 2 to determine the limits of the axis.
<code>x_oob</code>	For a continuous x variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
<code>x_sec_axis</code>	A secondary axis using the <code>ggplot2::sec_axis</code> or <code>ggplot2::dup_axis</code> function.
<code>x_title</code>	Axis title string. Use "" for no title.
<code>x_trans</code>	For a numeric x variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
<code>y_breaks</code>	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
<code>y_expand</code>	Padding to the limits with the <code>ggplot2::expansion</code> function, or a vector of length 2 (e.g. <code>c(0, 0)</code>).
<code>y_gridlines</code>	TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.
<code>y_include</code>	For a continuous y variable, any values that the limits should encompass (e.g. 0).
<code>y_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
<code>y_limits</code>	A vector of length 2 to determine the limits of the axis.
<code>y_oob</code>	For a continuous y variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
<code>y_sec_axis</code>	A secondary axis using the <code>ggplot2::sec_axis</code> or <code>ggplot2::dup_axis</code> function.
<code>y_title</code>	Axis title string. Use "" for no title.
<code>y_trans</code>	For a numeric y variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
<code>col_breaks</code>	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
<code>col_continuous</code>	For a continuous col variable, the type of colouring. Either "gradient" or "steps". Defaults to "gradient".
<code>col_include</code>	For a continuous col variable, any values that the limits should encompass (e.g. 0).
<code>col_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
<code>col_legend_place</code>	The place for the legend. Either "bottom", "right", "top" or "left". Or just the first letter of each.
<code>col_legend_ncol</code>	The number of columns for the legend elements.
<code>col_legend_nrow</code>	The number of rows for the legend elements.
<code>col_legend_rev</code>	Reverse the elements of the legend. Defaults to FALSE.
<code>col_limits</code>	A vector to determine the limits of the colour scale.

<code>col_oob</code>	For a continuous col variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
<code>col_rescale</code>	For a continuous col variable, a <code>scales::rescale</code> function.
<code>col_title</code>	Legend title string. Use "" for no title.
<code>col_trans</code>	For a numeric col variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
<code>facet_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a named vector of labels (e.g. <code>c("value" = "label", ...)</code>).
<code>facet_ncol</code>	The number of columns of facets. Only applies to a facet layout of "wrap".
<code>facet_nrow</code>	The number of rows of facets. Only applies to a facet layout of "wrap".
<code>facet_scales</code>	Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
<code>facet_space</code>	Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".
<code>facet_layout</code>	Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or <code>facet2</code>) argument is provided, then defaults to "wrap". If NULL and both <code>facet</code> and <code>facet2</code> arguments are provided, defaults to "grid".
<code>facet_switch</code>	Whether the facet layout is "grid", whether to switch the facet labels to the opposite side of the plot. Either "x", "y" or "both".
<code>linetype_title</code>	Legend title string. Use "" for no title.
<code>shape_title</code>	Legend title string. Use "" for no title.
<code>size_title</code>	Legend title string. Use "" for no title.
<code>caption</code>	Caption title string.
<code>titles</code>	A function to format unspecified titles. Defaults to <code>snakecase::to_sentence_case</code> .
<code>theme</code>	A <code>ggplot2</code> theme.

Value

A `ggplot` object.

Examples

```
library(dplyr)
library(palmerpenguins)

penguins |>
  tidyr::drop_na(sex) |>
  gg_freqpoly(
    x = flipper_length_mm,
    col = sex,
    facet = species,
    pal = c("#1B9E77", "#9E361B"),
    col_labels = stringr::str_to_sentence
  )
```

`gg_hex`*Hex ggplot*

Description

Create a hex ggplot with a wrapper around `ggplot2::geom_hex(stat = "binhex", ...)`.

Usage

```
gg_hex(  
  data = NULL,  
  x = NULL,  
  y = NULL,  
  facet = NULL,  
  facet2 = NULL,  
  group = NULL,  
  text = NULL,  
  mapping = NULL,  
  stat = "binhex",  
  position = "identity",  
  coord = ggplot2::coord_cartesian(clip = "off"),  
  pal = NULL,  
  pal_na = pal_grey,  
  alpha = 1,  
  ...,  
  title = NULL,  
  subtitle = NULL,  
  x_breaks = NULL,  
  x_expand = NULL,  
  x_gridlines = NULL,  
  x_include = NULL,  
  x_labels = NULL,  
  x_limits = NULL,  
  x_oob = scales::oob_keep,  
  x_sec_axis = ggplot2::waiver(),  
  x_title = NULL,  
  x_trans = "identity",  
  y_breaks = NULL,  
  y_expand = NULL,  
  y_gridlines = NULL,  
  y_include = NULL,  
  y_labels = NULL,  
  y_limits = NULL,  
  y_oob = scales::oob_keep,  
  y_sec_axis = ggplot2::waiver(),  
  y_title = NULL,  
  y_trans = "identity",
```

```

col_breaks = NULL,
col_continuous = "gradient",
col_include = NULL,
col_labels = NULL,
col_legend_place = NULL,
col_legend_ncol = NULL,
col_legend_nrow = NULL,
col_legend_rev = FALSE,
col_limits = NULL,
col_oob = scales::oob_keep,
col_rescale = scales::rescale(),
col_title = NULL,
col_trans = "identity",
facet_labels = NULL,
facet_ncol = NULL,
facet_nrow = NULL,
facet_scales = "fixed",
facet_space = "fixed",
facet_layout = NULL,
facet_switch = NULL,
linetype_title = NULL,
shape_title = NULL,
size_title = NULL,
caption = NULL,
titles = snakecase::to_sentence_case,
theme = NULL
)

```

Arguments

<code>data</code>	A data frame or tibble.
<code>x</code>	Unquoted x aesthetic variable.
<code>y</code>	Unquoted y aesthetic variable.
<code>facet</code>	Unquoted facet aesthetic variable.
<code>facet2</code>	Unquoted second facet variable.
<code>group</code>	Unquoted group aesthetic variable.
<code>text</code>	Unquoted text aesthetic variable.
<code>mapping</code>	Map additional aesthetics using the <code>ggplot2::aes</code> function (e.g. <code>shape</code>). Excludes colour, fill or alpha.
<code>stat</code>	A <code>ggplot2</code> character string stat.
<code>position</code>	Position adjustment. Either a character string (e.g. <code>"identity"</code>), or a function (e.g. <code>ggplot2::position_identity()</code>).
<code>coord</code>	A coordinate function from <code>ggplot2</code> (e.g. <code>ggplot2::coord_cartesian(clip = "off")</code>).
<code>pal</code>	Colours to use. A character vector of hex codes (or names).
<code>pal_na</code>	Colour to use for NA values. A character vector of a hex code (or name).

alpha	Opacity. A number between 0 and 1.
...	Other arguments passed to the <code>ggplot2::geom_hex</code> function.
title	Title string.
subtitle	Subtitle string.
x_breaks	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
x_expand	Padding to the limits with the <code>ggplot2::expansion</code> function, or a vector of length 2 (e.g. <code>c(0, 0)</code>).
x_gridlines	TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.
x_include	For a continuous x variable, any values that the limits should encompass (e.g. 0).
x_labels	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
x_limits	A vector of length 2 to determine the limits of the axis.
x_oob	For a continuous x variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
x_sec_axis	A secondary axis using the <code>ggplot2::sec_axis</code> or <code>ggplot2::dup_axis</code> function.
x_title	Axis title string. Use "" for no title.
x_trans	For a numeric x variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
y_breaks	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
y_expand	Padding to the limits with the <code>ggplot2::expansion</code> function, or a vector of length 2 (e.g. <code>c(0, 0)</code>).
y_gridlines	TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.
y_include	For a continuous y variable, any values that the limits should encompass (e.g. 0).
y_labels	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
y_limits	A vector of length 2 to determine the limits of the axis.
y_oob	For a continuous y variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
y_sec_axis	A secondary axis using the <code>ggplot2::sec_axis</code> or <code>ggplot2::dup_axis</code> function.
y_title	Axis title string. Use "" for no title.
y_trans	For a numeric y variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
col_breaks	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
col_continuous	For a continuous col variable, the type of colouring. Either "gradient" or "steps". Defaults to "gradient".
col_include	For a continuous col variable, any values that the limits should encompass (e.g. 0).

<code>col_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
<code>col_legend_place</code>	The place for the legend. Either "bottom", "right", "top" or "left". Or just the first letter of each.
<code>col_legend_ncol</code>	The number of columns for the legend elements.
<code>col_legend_nrow</code>	The number of rows for the legend elements.
<code>col_legend_rev</code>	Reverse the elements of the legend. Defaults to FALSE.
<code>col_limits</code>	A vector to determine the limits of the colour scale.
<code>col_oob</code>	For a continuous col variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
<code>col_rescale</code>	For a continuous col variable, a <code>scales::rescale</code> function.
<code>col_title</code>	Legend title string. Use "" for no title.
<code>col_trans</code>	For a numeric col variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
<code>facet_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a named vector of labels (e.g. <code>c("value" = "label", ...)</code>).
<code>facet_ncol</code>	The number of columns of facets. Only applies to a facet layout of "wrap".
<code>facet_nrow</code>	The number of rows of facets. Only applies to a facet layout of "wrap".
<code>facet_scales</code>	Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
<code>facet_space</code>	Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".
<code>facet_layout</code>	Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or <code>facet2</code>) argument is provided, then defaults to "wrap". If NULL and both <code>facet</code> and <code>facet2</code> arguments are provided, defaults to "grid".
<code>facet_switch</code>	Whether the facet layout is "grid", whether to switch the facet labels to the opposite side of the plot. Either "x", "y" or "both".
<code>linetype_title</code>	Legend title string. Use "" for no title.
<code>shape_title</code>	Legend title string. Use "" for no title.
<code>size_title</code>	Legend title string. Use "" for no title.
<code>caption</code>	Caption title string.
<code>titles</code>	A function to format unspecified titles. Defaults to <code>snakecase::to_sentence_case</code> .
<code>theme</code>	A ggplot2 theme.

Value

A ggplot object.

Examples

```
library(ggplot2)

diamonds |>
  gg_hex(
    x = carat,
    y = price,
    pal = viridis::cividis(9),
    y_limits = c(0, 20000),
    coord = ggplot2::coord_cartesian(clip = "on")
  )
```

gg_histogram

Histogram ggplot

Description

Create a histogram ggplot with a wrapper around `ggplot2::geom_histogram(stat = "bin", ...)`.

Usage

```
gg_histogram(
  data = NULL,
  x = NULL,
  y = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  text = NULL,
  mapping = NULL,
  stat = "bin",
  position = "stack",
  coord = ggplot2::coord_cartesian(clip = "off"),
  pal = NULL,
  pal_na = pal_grey,
  alpha = 0.9,
  ...,
  title = NULL,
  subtitle = NULL,
  x_breaks = NULL,
  x_expand = NULL,
  x_gridlines = NULL,
  x_include = NULL,
  x_labels = NULL,
  x_limits = NULL,
```

```

x_oob = scales::oob_keep,
x_sec_axis = ggplot2::waiver(),
x_title = NULL,
x_trans = "identity",
y_breaks = NULL,
y_expand = NULL,
y_gridlines = NULL,
y_include = NULL,
y_labels = NULL,
y_limits = NULL,
y_oob = scales::oob_keep,
y_sec_axis = ggplot2::waiver(),
y_title = NULL,
y_trans = "identity",
col_breaks = NULL,
col_continuous = "gradient",
col_include = NULL,
col_labels = NULL,
col_legend_place = NULL,
col_legend_ncol = NULL,
col_legend_nrow = NULL,
col_legend_rev = FALSE,
col_limits = NULL,
col_oob = scales::oob_keep,
col_rescale = scales::rescale(),
col_title = NULL,
col_trans = "identity",
facet_labels = NULL,
facet_ncol = NULL,
facet_nrow = NULL,
facet_scales = "fixed",
facet_space = "fixed",
facet_layout = NULL,
facet_switch = NULL,
linetype_title = NULL,
shape_title = NULL,
size_title = NULL,
caption = NULL,
titles = snakecase::to_sentence_case,
theme = NULL
)

```

Arguments

data	A data frame or tibble.
x	Unquoted x aesthetic variable.
y	Unquoted y aesthetic variable.
col	Unquoted col and fill aesthetic variable.

facet	Unquoted facet aesthetic variable.
facet2	Unquoted second facet variable.
group	Unquoted group aesthetic variable.
text	Unquoted text aesthetic variable.
mapping	Map additional aesthetics using the <code>ggplot2::aes</code> function (e.g. <code>shape</code>). Excludes colour, fill or alpha.
stat	A <code>ggplot2</code> character string stat.
position	Position adjustment. Either a character string (e.g. <code>"identity"</code>), or a function (e.g. <code>ggplot2::position_identity()</code>).
coord	A coordinate function from <code>ggplot2</code> (e.g. <code>ggplot2::coord_cartesian(clip = "off")</code>).
pal	Colours to use. A character vector of hex codes (or names).
pal_na	Colour to use for NA values. A character vector of a hex code (or name).
alpha	Opacity. A number between 0 and 1.
...	Other arguments passed to the <code>ggplot2::geom_histogram</code> function.
title	Title string.
subtitle	Subtitle string.
x_breaks	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
x_expand	Padding to the limits with the <code>ggplot2::expansion</code> function, or a vector of length 2 (e.g. <code>c(0, 0)</code>).
x_gridlines	TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.
x_include	For a continuous x variable, any values that the limits should encompass (e.g. 0).
x_labels	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
x_limits	A vector of length 2 to determine the limits of the axis.
x_oob	For a continuous x variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
x_sec_axis	A secondary axis using the <code>ggplot2::sec_axis</code> or <code>ggplot2::dup_axis</code> function.
x_title	Axis title string. Use "" for no title.
x_trans	For a numeric x variable, a transformation object (e.g. <code>"log10"</code> , <code>"sqrt"</code> or <code>"reverse"</code>).
y_breaks	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
y_expand	Padding to the limits with the <code>ggplot2::expansion</code> function, or a vector of length 2 (e.g. <code>c(0, 0)</code>).
y_gridlines	TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.
y_include	For a continuous y variable, any values that the limits should encompass (e.g. 0).

<code>y_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
<code>y_limits</code>	A vector of length 2 to determine the limits of the axis.
<code>y_oob</code>	For a continuous y variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
<code>y_sec_axis</code>	A secondary axis using the <code>ggplot2::sec_axis</code> or <code>ggplot2::dup_axis</code> function.
<code>y_title</code>	Axis title string. Use "" for no title.
<code>y_trans</code>	For a numeric y variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
<code>col_breaks</code>	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
<code>col_continuous</code>	For a continuous col variable, the type of colouring. Either "gradient" or "steps". Defaults to "gradient".
<code>col_include</code>	For a continuous col variable, any values that the limits should encompass (e.g. 0).
<code>col_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
<code>col_legend_place</code>	The place for the legend. Either "bottom", "right", "top" or "left". Or just the first letter of each.
<code>col_legend_ncol</code>	The number of columns for the legend elements.
<code>col_legend_nrow</code>	The number of rows for the legend elements.
<code>col_legend_rev</code>	Reverse the elements of the legend. Defaults to FALSE.
<code>col_limits</code>	A vector to determine the limits of the colour scale.
<code>col_oob</code>	For a continuous col variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
<code>col_rescale</code>	For a continuous col variable, a <code>scales::rescale</code> function.
<code>col_title</code>	Legend title string. Use "" for no title.
<code>col_trans</code>	For a numeric col variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
<code>facet_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a named vector of labels (e.g. <code>c("value" = "label", ...)</code>).
<code>facet_ncol</code>	The number of columns of facets. Only applies to a facet layout of "wrap".
<code>facet_nrow</code>	The number of rows of facets. Only applies to a facet layout of "wrap".
<code>facet_scales</code>	Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
<code>facet_space</code>	Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".

facet_layout	Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or facet2) argument is provided, then defaults to "wrap". If NULL and both facet and facet2 arguments are provided, defaults to "grid".
facet_switch	Whether the facet layout is "grid", whether to switch the facet labels to the opposite side of the plot. Either "x", "y" or "both".
linetype_title	Legend title string. Use "" for no title.
shape_title	Legend title string. Use "" for no title.
size_title	Legend title string. Use "" for no title.
caption	Caption title string.
titles	A function to format unspecified titles. Defaults to snakecase::to_sentence_case.
theme	A ggplot2 theme.

Value

A ggplot object.

Examples

```
library(dplyr)
library(palmerpenguins)

penguins |>
  tidyr::drop_na(sex) |>
  gg_histogram(
    x = flipper_length_mm,
    col = sex,
    facet = species,
    bins = 50,
    pal = c("#1B9E77", "#9E361B"),
    col_labels = stringr::str_to_sentence
  )
```

 gg_jitter

Jitter ggplot

Description

Create a jitter ggplot with a wrapper around ggplot2::geom_jitter(stat = "identity", ...).

Usage

```
gg_jitter(
  data = NULL,
  x = NULL,
  y = NULL,
```

```
col = NULL,
facet = NULL,
facet2 = NULL,
group = NULL,
text = NULL,
mapping = NULL,
stat = "identity",
position = "jitter",
coord = ggplot2::coord_cartesian(clip = "off"),
pal = NULL,
pal_na = pal_grey,
alpha = 1,
...,
title = NULL,
subtitle = NULL,
x_breaks = NULL,
x_expand = NULL,
x_gridlines = NULL,
x_include = NULL,
x_labels = NULL,
x_limits = NULL,
x_oob = scales::oob_keep,
x_sec_axis = ggplot2::waiver(),
x_title = NULL,
x_trans = "identity",
y_breaks = NULL,
y_expand = NULL,
y_gridlines = NULL,
y_include = NULL,
y_labels = NULL,
y_limits = NULL,
y_oob = scales::oob_keep,
y_sec_axis = ggplot2::waiver(),
y_title = NULL,
y_trans = "identity",
col_breaks = NULL,
col_continuous = "gradient",
col_include = NULL,
col_labels = NULL,
col_legend_place = NULL,
col_legend_ncol = NULL,
col_legend_nrow = NULL,
col_legend_rev = FALSE,
col_limits = NULL,
col_oob = scales::oob_keep,
col_rescale = scales::rescale(),
col_title = NULL,
col_trans = "identity",
```

```

facet_labels = NULL,
facet_ncol = NULL,
facet_nrow = NULL,
facet_scales = "fixed",
facet_space = "fixed",
facet_layout = NULL,
facet_switch = NULL,
linetype_title = NULL,
shape_title = NULL,
size_title = NULL,
caption = NULL,
titles = snakecase::to_sentence_case,
theme = NULL
)

```

Arguments

<code>data</code>	A data frame or tibble.
<code>x</code>	Unquoted x aesthetic variable.
<code>y</code>	Unquoted y aesthetic variable.
<code>col</code>	Unquoted col and fill aesthetic variable.
<code>facet</code>	Unquoted facet aesthetic variable.
<code>facet2</code>	Unquoted second facet variable.
<code>group</code>	Unquoted group aesthetic variable.
<code>text</code>	Unquoted text aesthetic variable.
<code>mapping</code>	Map additional aesthetics using the <code>ggplot2::aes</code> function (e.g. <code>shape</code>). Excludes colour, fill or alpha.
<code>stat</code>	A <code>ggplot2</code> character string stat.
<code>position</code>	Position adjustment. Either a character string (e.g. <code>"identity"</code>), or a function (e.g. <code>ggplot2::position_identity()</code>).
<code>coord</code>	A coordinate function from <code>ggplot2</code> (e.g. <code>ggplot2::coord_cartesian(clip = "off")</code>).
<code>pal</code>	Colours to use. A character vector of hex codes (or names).
<code>pal_na</code>	Colour to use for NA values. A character vector of a hex code (or name).
<code>alpha</code>	Opacity. A number between 0 and 1.
<code>...</code>	Other arguments passed to the <code>ggplot2::geom_jitter</code> function.
<code>title</code>	Title string.
<code>subtitle</code>	Subtitle string.
<code>x_breaks</code>	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
<code>x_expand</code>	Padding to the limits with the <code>ggplot2::expansion</code> function, or a vector of length 2 (e.g. <code>c(0, 0)</code>).
<code>x_gridlines</code>	TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.

<code>x_include</code>	For a continuous x variable, any values that the limits should encompass (e.g. 0).
<code>x_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
<code>x_limits</code>	A vector of length 2 to determine the limits of the axis.
<code>x_oob</code>	For a continuous x variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
<code>x_sec_axis</code>	A secondary axis using the <code>ggplot2::sec_axis</code> or <code>ggplot2::dup_axis</code> function.
<code>x_title</code>	Axis title string. Use "" for no title.
<code>x_trans</code>	For a numeric x variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
<code>y_breaks</code>	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
<code>y_expand</code>	Padding to the limits with the <code>ggplot2::expansion</code> function, or a vector of length 2 (e.g. <code>c(0, 0)</code>).
<code>y_gridlines</code>	TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.
<code>y_include</code>	For a continuous y variable, any values that the limits should encompass (e.g. 0).
<code>y_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
<code>y_limits</code>	A vector of length 2 to determine the limits of the axis.
<code>y_oob</code>	For a continuous y variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
<code>y_sec_axis</code>	A secondary axis using the <code>ggplot2::sec_axis</code> or <code>ggplot2::dup_axis</code> function.
<code>y_title</code>	Axis title string. Use "" for no title.
<code>y_trans</code>	For a numeric y variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
<code>col_breaks</code>	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
<code>col_continuous</code>	For a continuous col variable, the type of colouring. Either "gradient" or "steps". Defaults to "gradient".
<code>col_include</code>	For a continuous col variable, any values that the limits should encompass (e.g. 0).
<code>col_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
<code>col_legend_place</code>	The place for the legend. Either "bottom", "right", "top" or "left". Or just the first letter of each.
<code>col_legend_ncol</code>	The number of columns for the legend elements.
<code>col_legend_nrow</code>	The number of rows for the legend elements.
<code>col_legend_rev</code>	Reverse the elements of the legend. Defaults to FALSE.

<code>col_limits</code>	A vector to determine the limits of the colour scale.
<code>col_oob</code>	For a continuous col variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
<code>col_rescale</code>	For a continuous col variable, a <code>scales::rescale</code> function.
<code>col_title</code>	Legend title string. Use "" for no title.
<code>col_trans</code>	For a numeric col variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
<code>facet_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a named vector of labels (e.g. <code>c("value" = "label", ...)</code>).
<code>facet_ncol</code>	The number of columns of facets. Only applies to a facet layout of "wrap".
<code>facet_nrow</code>	The number of rows of facets. Only applies to a facet layout of "wrap".
<code>facet_scales</code>	Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
<code>facet_space</code>	Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".
<code>facet_layout</code>	Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or <code>facet2</code>) argument is provided, then defaults to "wrap". If NULL and both <code>facet</code> and <code>facet2</code> arguments are provided, defaults to "grid".
<code>facet_switch</code>	Whether the facet layout is "grid", whether to switch the facet labels to the opposite side of the plot. Either "x", "y" or "both".
<code>linetype_title</code>	Legend title string. Use "" for no title.
<code>shape_title</code>	Legend title string. Use "" for no title.
<code>size_title</code>	Legend title string. Use "" for no title.
<code>caption</code>	Caption title string.
<code>titles</code>	A function to format unspecified titles. Defaults to <code>snakecase::to_sentence_case</code> .
<code>theme</code>	A ggplot2 theme.

Value

A ggplot object.

Examples

```
library(palmerpenguins)

penguins |>
  gg_jitter(
    x = species,
    y = body_mass_g,
    col = flipper_length_mm,
    col_continuous = "steps",
    y_include = 0,
    position = ggplot2::position_jitter(height = 0)
  )
```

`gg_label`*Label ggplot*

Description

Create a label ggplot with a wrapper around `ggplot2::geom_label(stat = "identity", ...)`.

Usage

```
gg_label(  
  data = NULL,  
  x = NULL,  
  y = NULL,  
  col = NULL,  
  facet = NULL,  
  facet2 = NULL,  
  group = NULL,  
  label = NULL,  
  text = NULL,  
  mapping = NULL,  
  stat = "identity",  
  position = "identity",  
  coord = ggplot2::coord_cartesian(clip = "off"),  
  pal = NULL,  
  pal_na = pal_grey,  
  alpha = 0.05,  
  ...,  
  title = NULL,  
  subtitle = NULL,  
  x_breaks = NULL,  
  x_expand = NULL,  
  x_gridlines = NULL,  
  x_include = NULL,  
  x_labels = NULL,  
  x_limits = NULL,  
  x_oob = scales::oob_keep,  
  x_sec_axis = ggplot2::waiver(),  
  x_title = NULL,  
  x_trans = "identity",  
  y_breaks = NULL,  
  y_expand = NULL,  
  y_gridlines = NULL,  
  y_include = NULL,  
  y_labels = NULL,  
  y_limits = NULL,  
  y_oob = scales::oob_keep,  
  y_sec_axis = ggplot2::waiver(),
```

```

y_title = NULL,
y_trans = "identity",
col_breaks = NULL,
col_continuous = "gradient",
col_include = NULL,
col_labels = NULL,
col_legend_place = NULL,
col_legend_ncol = NULL,
col_legend_nrow = NULL,
col_legend_rev = FALSE,
col_limits = NULL,
col_oob = scales::oob_keep,
col_rescale = scales::rescale(),
col_title = NULL,
col_trans = "identity",
facet_labels = NULL,
facet_ncol = NULL,
facet_nrow = NULL,
facet_scales = "fixed",
facet_space = "fixed",
facet_layout = NULL,
facet_switch = NULL,
linetype_title = NULL,
shape_title = NULL,
size_title = NULL,
caption = NULL,
titles = snakecase::to_sentence_case,
theme = NULL
)

```

Arguments

data	A data frame or tibble.
x	Unquoted x aesthetic variable.
y	Unquoted y aesthetic variable.
col	Unquoted col and fill aesthetic variable.
facet	Unquoted facet aesthetic variable.
facet2	Unquoted second facet variable.
group	Unquoted group aesthetic variable.
label	Unquoted label aesthetic variable.
text	Unquoted text aesthetic variable.
mapping	Map additional aesthetics using the <code>ggplot2::aes</code> function (e.g. <code>shape</code>). Excludes colour, fill or alpha.
stat	A <code>ggplot2</code> character string stat.
position	Position adjustment. Either a character string (e.g. <code>"identity"</code>), or a function (e.g. <code>ggplot2::position_identity()</code>).

<code>coord</code>	A coordinate function from <code>ggplot2</code> (e.g. <code>ggplot2::coord_cartesian(clip = "off")</code>).
<code>pal</code>	Colours to use. A character vector of hex codes (or names).
<code>pal_na</code>	Colour to use for NA values. A character vector of a hex code (or name).
<code>alpha</code>	Opacity. A number between 0 and 1.
<code>...</code>	Other arguments passed to the <code>ggplot2::geom_label</code> function.
<code>title</code>	Title string.
<code>subtitle</code>	Subtitle string.
<code>x_breaks</code>	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
<code>x_expand</code>	Padding to the limits with the <code>ggplot2::expansion</code> function, or a vector of length 2 (e.g. <code>c(0, 0)</code>).
<code>x_gridlines</code>	TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.
<code>x_include</code>	For a continuous x variable, any values that the limits should encompass (e.g. 0).
<code>x_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
<code>x_limits</code>	A vector of length 2 to determine the limits of the axis.
<code>x_oob</code>	For a continuous x variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
<code>x_sec_axis</code>	A secondary axis using the <code>ggplot2::sec_axis</code> or <code>ggplot2::dup_axis</code> function.
<code>x_title</code>	Axis title string. Use "" for no title.
<code>x_trans</code>	For a numeric x variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
<code>y_breaks</code>	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
<code>y_expand</code>	Padding to the limits with the <code>ggplot2::expansion</code> function, or a vector of length 2 (e.g. <code>c(0, 0)</code>).
<code>y_gridlines</code>	TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.
<code>y_include</code>	For a continuous y variable, any values that the limits should encompass (e.g. 0).
<code>y_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
<code>y_limits</code>	A vector of length 2 to determine the limits of the axis.
<code>y_oob</code>	For a continuous y variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
<code>y_sec_axis</code>	A secondary axis using the <code>ggplot2::sec_axis</code> or <code>ggplot2::dup_axis</code> function.
<code>y_title</code>	Axis title string. Use "" for no title.
<code>y_trans</code>	For a numeric y variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
<code>col_breaks</code>	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.

col_continuous	For a continuous col variable, the type of colouring. Either "gradient" or "steps". Defaults to "gradient".
col_include	For a continuous col variable, any values that the limits should encompass (e.g. 0).
col_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
col_legend_place	The place for the legend. Either "bottom", "right", "top" or "left". Or just the first letter of each.
col_legend_ncol	The number of columns for the legend elements.
col_legend_nrow	The number of rows for the legend elements.
col_legend_rev	Reverse the elements of the legend. Defaults to FALSE.
col_limits	A vector to determine the limits of the colour scale.
col_oob	For a continuous col variable, a scales::oob_* function of how to handle values outside of limits (e.g. scales::oob_keep). Defaults to scales::oob_keep.
col_rescale	For a continuous col variable, a scales::rescale function.
col_title	Legend title string. Use "" for no title.
col_trans	For a numeric col variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
facet_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a named vector of labels (e.g. c("value" = "label", ...)).
facet_ncol	The number of columns of facets. Only applies to a facet layout of "wrap".
facet_nrow	The number of rows of facets. Only applies to a facet layout of "wrap".
facet_scales	Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
facet_space	Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".
facet_layout	Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or facet2) argument is provided, then defaults to "wrap". If NULL and both facet and facet2 arguments are provided, defaults to "grid".
facet_switch	Whether the facet layout is "grid", whether to switch the facet labels to the opposite side of the plot. Either "x", "y" or "both".
linetype_title	Legend title string. Use "" for no title.
shape_title	Legend title string. Use "" for no title.
size_title	Legend title string. Use "" for no title.
caption	Caption title string.
titles	A function to format unspecified titles. Defaults to snakecase::to_sentence_case.
theme	A ggplot2 theme.

Value

A ggplot object.

Examples

```
library(dplyr)

bind_rows(
  mtcars |> slice_min(order_by = mpg),
  mtcars |> slice_max(order_by = mpg)
) |>
tibble::rownames_to_column(var = "model") %>%
gg_label(
  x = model,
  y = mpg,
  col = mpg,
  label = model,
  size = 3.53,
  y_include = c(min(.$mpg) * 0.95, max(.$mpg) * 1.05),
  pal = RColorBrewer::brewer.pal(9, "RdBu"),
  y_title = "Miles per gallon"
)
```

gg_line

Line ggplot

Description

Create a line ggplot with a wrapper around `ggplot2::geom_line(stat = "identity", ...)`.

Usage

```
gg_line(
  data = NULL,
  x = NULL,
  y = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  text = NULL,
  mapping = NULL,
  stat = "identity",
  position = "identity",
  coord = ggplot2::coord_cartesian(clip = "off"),
  pal = NULL,
  pal_na = pal_grey,
```

```
alpha = 1,  
...,  
title = NULL,  
subtitle = NULL,  
x_breaks = NULL,  
x_expand = NULL,  
x_gridlines = NULL,  
x_include = NULL,  
x_labels = NULL,  
x_limits = NULL,  
x_oob = scales::oob_keep,  
x_sec_axis = ggplot2::waiver(),  
x_title = NULL,  
x_trans = "identity",  
y_breaks = NULL,  
y_expand = NULL,  
y_gridlines = NULL,  
y_include = NULL,  
y_labels = NULL,  
y_limits = NULL,  
y_oob = scales::oob_keep,  
y_sec_axis = ggplot2::waiver(),  
y_title = NULL,  
y_trans = "identity",  
col_breaks = NULL,  
col_continuous = "gradient",  
col_include = NULL,  
col_labels = NULL,  
col_legend_place = NULL,  
col_legend_ncol = NULL,  
col_legend_nrow = NULL,  
col_legend_rev = FALSE,  
col_limits = NULL,  
col_oob = scales::oob_keep,  
col_rescale = scales::rescale(),  
col_title = NULL,  
col_trans = "identity",  
facet_labels = NULL,  
facet_ncol = NULL,  
facet_nrow = NULL,  
facet_scales = "fixed",  
facet_space = "fixed",  
facet_layout = NULL,  
facet_switch = NULL,  
linetype_title = NULL,  
shape_title = NULL,  
size_title = NULL,  
caption = NULL,
```

```

  titles = snakecase::to_sentence_case,
  theme = NULL
)

```

Arguments

<code>data</code>	A data frame or tibble.
<code>x</code>	Unquoted x aesthetic variable.
<code>y</code>	Unquoted y aesthetic variable.
<code>col</code>	Unquoted col and fill aesthetic variable.
<code>facet</code>	Unquoted facet aesthetic variable.
<code>facet2</code>	Unquoted second facet variable.
<code>group</code>	Unquoted group aesthetic variable.
<code>text</code>	Unquoted text aesthetic variable.
<code>mapping</code>	Map additional aesthetics using the <code>ggplot2::aes</code> function (e.g. <code>shape</code>). Excludes colour, fill or alpha.
<code>stat</code>	A <code>ggplot2</code> character string stat.
<code>position</code>	Position adjustment. Either a character string (e.g. <code>"identity"</code>), or a function (e.g. <code>ggplot2::position_identity()</code>).
<code>coord</code>	A coordinate function from <code>ggplot2</code> (e.g. <code>ggplot2::coord_cartesian(clip = "off")</code>).
<code>pal</code>	Colours to use. A character vector of hex codes (or names).
<code>pal_na</code>	Colour to use for NA values. A character vector of a hex code (or name).
<code>alpha</code>	Opacity. A number between 0 and 1.
<code>...</code>	Other arguments passed to the <code>ggplot2::geom_line</code> function.
<code>title</code>	Title string.
<code>subtitle</code>	Subtitle string.
<code>x_breaks</code>	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
<code>x_expand</code>	Padding to the limits with the <code>ggplot2::expansion</code> function, or a vector of length 2 (e.g. <code>c(0, 0)</code>).
<code>x_gridlines</code>	TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.
<code>x_include</code>	For a continuous x variable, any values that the limits should encompass (e.g. 0).
<code>x_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
<code>x_limits</code>	A vector of length 2 to determine the limits of the axis.
<code>x_oob</code>	For a continuous x variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
<code>x_sec_axis</code>	A secondary axis using the <code>ggplot2::sec_axis</code> or <code>ggplot2::dup_axis</code> function.
<code>x_title</code>	Axis title string. Use <code>""</code> for no title.

x_trans	For a numeric x variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
y_breaks	A scales::breaks_* function (e.g. scales::breaks_pretty()), or a vector of breaks.
y_expand	Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
y_gridlines	TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.
y_include	For a continuous y variable, any values that the limits should encompass (e.g. 0).
y_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
y_limits	A vector of length 2 to determine the limits of the axis.
y_oob	For a continuous y variable, a scales::oob_* function of how to handle values outside of limits (e.g. scales::oob_keep). Defaults to scales::oob_keep.
y_sec_axis	A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
y_title	Axis title string. Use "" for no title.
y_trans	For a numeric y variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
col_breaks	A scales::breaks_* function (e.g. scales::breaks_pretty()), or a vector of breaks.
col_continuous	For a continuous col variable, the type of colouring. Either "gradient" or "steps". Defaults to "gradient".
col_include	For a continuous col variable, any values that the limits should encompass (e.g. 0).
col_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
col_legend_place	The place for the legend. Either "bottom", "right", "top" or "left". Or just the first letter of each.
col_legend_ncol	The number of columns for the legend elements.
col_legend_nrow	The number of rows for the legend elements.
col_legend_rev	Reverse the elements of the legend. Defaults to FALSE.
col_limits	A vector to determine the limits of the colour scale.
col_oob	For a continuous col variable, a scales::oob_* function of how to handle values outside of limits (e.g. scales::oob_keep). Defaults to scales::oob_keep.
col_rescale	For a continuous col variable, a scales::rescale function.
col_title	Legend title string. Use "" for no title.
col_trans	For a numeric col variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
facet_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a named vector of labels (e.g. c("value" = "label", ...)).

facet_ncol	The number of columns of facets. Only applies to a facet layout of "wrap".
facet_nrow	The number of rows of facets. Only applies to a facet layout of "wrap".
facet_scales	Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
facet_space	Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".
facet_layout	Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or facet2) argument is provided, then defaults to "wrap". If NULL and both facet and facet2 arguments are provided, defaults to "grid".
facet_switch	Whether the facet layout is "grid", whether to switch the facet labels to the opposite side of the plot. Either "x", "y" or "both".
linetype_title	Legend title string. Use "" for no title.
shape_title	Legend title string. Use "" for no title.
size_title	Legend title string. Use "" for no title.
caption	Caption title string.
titles	A function to format unspecified titles. Defaults to snakecase::to_sentence_case.
theme	A ggplot2 theme.

Value

A ggplot object.

Examples

```
ggplot2::economics |>
  gg_line(
    x = date,
    y = unemploy,
    pal = "#9E361B",
    y_title = "Unemployment",
    y_include = 0
  )
```

gg_linerange

Linerange ggplot

Description

Create a linerange ggplot with a wrapper around ggplot2::geom_linerange(stat = "identity", ...).

Usage

```
gg_linerange(  
  data = NULL,  
  x = NULL,  
  xmin = NULL,  
  xmax = NULL,  
  y = NULL,  
  ymin = NULL,  
  ymax = NULL,  
  col = NULL,  
  facet = NULL,  
  facet2 = NULL,  
  group = NULL,  
  text = NULL,  
  mapping = NULL,  
  stat = "identity",  
  position = "identity",  
  coord = ggplot2::coord_cartesian(clip = "off"),  
  pal = NULL,  
  pal_na = pal_grey,  
  alpha = 1,  
  ...,  
  title = NULL,  
  subtitle = NULL,  
  x_breaks = NULL,  
  x_expand = NULL,  
  x_gridlines = NULL,  
  x_include = NULL,  
  x_labels = NULL,  
  x_limits = NULL,  
  x_oob = scales::oob_keep,  
  x_sec_axis = ggplot2::waiver(),  
  x_title = NULL,  
  x_trans = "identity",  
  y_breaks = NULL,  
  y_expand = NULL,  
  y_gridlines = NULL,  
  y_include = NULL,  
  y_labels = NULL,  
  y_limits = NULL,  
  y_oob = scales::oob_keep,  
  y_sec_axis = ggplot2::waiver(),  
  y_title = NULL,  
  y_trans = "identity",  
  col_breaks = NULL,  
  col_continuous = "gradient",  
  col_include = NULL,  
  col_labels = NULL,
```

```

col_legend_place = NULL,
col_legend_ncol = NULL,
col_legend_nrow = NULL,
col_legend_rev = FALSE,
col_limits = NULL,
col_oob = scales::oob_keep,
col_rescale = scales::rescale(),
col_title = NULL,
col_trans = "identity",
facet_labels = NULL,
facet_ncol = NULL,
facet_nrow = NULL,
facet_scales = "fixed",
facet_space = "fixed",
facet_layout = NULL,
facet_switch = NULL,
linetype_title = NULL,
shape_title = NULL,
size_title = NULL,
caption = NULL,
titles = snakecase::to_sentence_case,
theme = NULL
)

```

Arguments

<code>data</code>	A data frame or tibble.
<code>x</code>	Unquoted x aesthetic variable.
<code>xmin</code>	Unquoted xmin aesthetic variable.
<code>xmax</code>	Unquoted xmax aesthetic variable.
<code>y</code>	Unquoted y aesthetic variable.
<code>ymin</code>	Unquoted ymin aesthetic variable.
<code>ymax</code>	Unquoted ymax aesthetic variable.
<code>col</code>	Unquoted col and fill aesthetic variable.
<code>facet</code>	Unquoted facet aesthetic variable.
<code>facet2</code>	Unquoted second facet variable.
<code>group</code>	Unquoted group aesthetic variable.
<code>text</code>	Unquoted text aesthetic variable.
<code>mapping</code>	Map additional aesthetics using the <code>ggplot2::aes</code> function (e.g. <code>shape</code>). Excludes colour, fill or alpha.
<code>stat</code>	A <code>ggplot2</code> character string stat.
<code>position</code>	Position adjustment. Either a character string (e.g. <code>"identity"</code>), or a function (e.g. <code>ggplot2::position_identity()</code>).
<code>coord</code>	A coordinate function from <code>ggplot2</code> (e.g. <code>ggplot2::coord_cartesian(clip = "off")</code>).

<code>pal</code>	Colours to use. A character vector of hex codes (or names).
<code>pal_na</code>	Colour to use for NA values. A character vector of a hex code (or name).
<code>alpha</code>	Opacity. A number between 0 and 1.
<code>...</code>	Other arguments passed to the <code>ggplot2::geom_linerange</code> function.
<code>title</code>	Title string.
<code>subtitle</code>	Subtitle string.
<code>x_breaks</code>	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
<code>x_expand</code>	Padding to the limits with the <code>ggplot2::expansion</code> function, or a vector of length 2 (e.g. <code>c(0, 0)</code>).
<code>x_gridlines</code>	TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.
<code>x_include</code>	For a continuous x variable, any values that the limits should encompass (e.g. 0).
<code>x_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
<code>x_limits</code>	A vector of length 2 to determine the limits of the axis.
<code>x_oob</code>	For a continuous x variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
<code>x_sec_axis</code>	A secondary axis using the <code>ggplot2::sec_axis</code> or <code>ggplot2::dup_axis</code> function.
<code>x_title</code>	Axis title string. Use "" for no title.
<code>x_trans</code>	For a numeric x variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
<code>y_breaks</code>	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
<code>y_expand</code>	Padding to the limits with the <code>ggplot2::expansion</code> function, or a vector of length 2 (e.g. <code>c(0, 0)</code>).
<code>y_gridlines</code>	TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.
<code>y_include</code>	For a continuous y variable, any values that the limits should encompass (e.g. 0).
<code>y_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
<code>y_limits</code>	A vector of length 2 to determine the limits of the axis.
<code>y_oob</code>	For a continuous y variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
<code>y_sec_axis</code>	A secondary axis using the <code>ggplot2::sec_axis</code> or <code>ggplot2::dup_axis</code> function.
<code>y_title</code>	Axis title string. Use "" for no title.
<code>y_trans</code>	For a numeric y variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
<code>col_breaks</code>	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
<code>col_continuous</code>	For a continuous col variable, the type of colouring. Either "gradient" or "steps". Defaults to "gradient".

<code>col_include</code>	For a continuous col variable, any values that the limits should encompass (e.g. 0).
<code>col_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
<code>col_legend_place</code>	The place for the legend. Either "bottom", "right", "top" or "left". Or just the first letter of each.
<code>col_legend_ncol</code>	The number of columns for the legend elements.
<code>col_legend_nrow</code>	The number of rows for the legend elements.
<code>col_legend_rev</code>	Reverse the elements of the legend. Defaults to FALSE.
<code>col_limits</code>	A vector to determine the limits of the colour scale.
<code>col_oob</code>	For a continuous col variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
<code>col_rescale</code>	For a continuous col variable, a <code>scales::rescale</code> function.
<code>col_title</code>	Legend title string. Use "" for no title.
<code>col_trans</code>	For a numeric col variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
<code>facet_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a named vector of labels (e.g. <code>c("value" = "label", ...)</code>).
<code>facet_ncol</code>	The number of columns of facets. Only applies to a facet layout of "wrap".
<code>facet_nrow</code>	The number of rows of facets. Only applies to a facet layout of "wrap".
<code>facet_scales</code>	Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
<code>facet_space</code>	Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".
<code>facet_layout</code>	Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or facet2) argument is provided, then defaults to "wrap". If NULL and both facet and facet2 arguments are provided, defaults to "grid".
<code>facet_switch</code>	Whether the facet layout is "grid", whether to switch the facet labels to the opposite side of the plot. Either "x", "y" or "both".
<code>linetype_title</code>	Legend title string. Use "" for no title.
<code>shape_title</code>	Legend title string. Use "" for no title.
<code>size_title</code>	Legend title string. Use "" for no title.
<code>caption</code>	Caption title string.
<code>titles</code>	A function to format unspecified titles. Defaults to <code>snakecase::to_sentence_case</code> .
<code>theme</code>	A ggplot2 theme.

Value

A ggplot object.

Examples

```
data.frame(
  trt = factor(c(1, 1, 2, 2)),
  resp = c(1, 5, 3, 4),
  group = factor(c(1, 2, 1, 2)),
  upper = c(1.1, 5.3, 3.3, 4.2),
  lower = c(0.8, 4.6, 2.4, 3.6)
) |>
gg_linerange(
  x = trt,
  ymin = lower,
  ymax = upper,
  col = group,
  position = ggplot2::position_dodge(width = 0.2),
  x_title = "Treatment",
  y_title = "Response"
)
```

gg_path

Path ggplot

Description

Create a path ggplot with a wrapper around `ggplot2::geom_path(stat = "identity", ...)`.

Usage

```
gg_path(
  data = NULL,
  x = NULL,
  y = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  text = NULL,
  mapping = NULL,
  stat = "identity",
  position = "identity",
  coord = ggplot2::coord_cartesian(clip = "off"),
  pal = NULL,
  pal_na = pal_grey,
  alpha = 1,
```

```
...,
title = NULL,
subtitle = NULL,
x_breaks = NULL,
x_expand = NULL,
x_gridlines = NULL,
x_include = NULL,
x_labels = NULL,
x_limits = NULL,
x_oob = scales::oob_keep,
x_sec_axis = ggplot2::waiver(),
x_title = NULL,
x_trans = "identity",
y_breaks = NULL,
y_expand = NULL,
y_gridlines = NULL,
y_include = NULL,
y_labels = NULL,
y_limits = NULL,
y_oob = scales::oob_keep,
y_sec_axis = ggplot2::waiver(),
y_title = NULL,
y_trans = "identity",
col_breaks = NULL,
col_continuous = "gradient",
col_include = NULL,
col_labels = NULL,
col_legend_place = NULL,
col_legend_ncol = NULL,
col_legend_nrow = NULL,
col_legend_rev = FALSE,
col_limits = NULL,
col_oob = scales::oob_keep,
col_rescale = scales::rescale(),
col_title = NULL,
col_trans = "identity",
facet_labels = NULL,
facet_ncol = NULL,
facet_nrow = NULL,
facet_scales = "fixed",
facet_space = "fixed",
facet_layout = NULL,
facet_switch = NULL,
linetype_title = NULL,
shape_title = NULL,
size_title = NULL,
caption = NULL,
titles = snakecase::to_sentence_case,
```

```

    theme = NULL
  )

```

Arguments

<code>data</code>	A data frame or tibble.
<code>x</code>	Unquoted x aesthetic variable.
<code>y</code>	Unquoted y aesthetic variable.
<code>col</code>	Unquoted col and fill aesthetic variable.
<code>facet</code>	Unquoted facet aesthetic variable.
<code>facet2</code>	Unquoted second facet variable.
<code>group</code>	Unquoted group aesthetic variable.
<code>text</code>	Unquoted text aesthetic variable.
<code>mapping</code>	Map additional aesthetics using the <code>ggplot2::aes</code> function (e.g. <code>shape</code>). Excludes colour, fill or alpha.
<code>stat</code>	A <code>ggplot2</code> character string stat.
<code>position</code>	Position adjustment. Either a character string (e.g. <code>"identity"</code>), or a function (e.g. <code>ggplot2::position_identity()</code>).
<code>coord</code>	A coordinate function from <code>ggplot2</code> (e.g. <code>ggplot2::coord_cartesian(clip = "off")</code>).
<code>pal</code>	Colours to use. A character vector of hex codes (or names).
<code>pal_na</code>	Colour to use for NA values. A character vector of a hex code (or name).
<code>alpha</code>	Opacity. A number between 0 and 1.
<code>...</code>	Other arguments passed to the <code>ggplot2::geom_path</code> function.
<code>title</code>	Title string.
<code>subtitle</code>	Subtitle string.
<code>x_breaks</code>	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
<code>x_expand</code>	Padding to the limits with the <code>ggplot2::expansion</code> function, or a vector of length 2 (e.g. <code>c(0, 0)</code>).
<code>x_gridlines</code>	TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.
<code>x_include</code>	For a continuous x variable, any values that the limits should encompass (e.g. 0).
<code>x_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
<code>x_limits</code>	A vector of length 2 to determine the limits of the axis.
<code>x_oob</code>	For a continuous x variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
<code>x_sec_axis</code>	A secondary axis using the <code>ggplot2::sec_axis</code> or <code>ggplot2::dup_axis</code> function.
<code>x_title</code>	Axis title string. Use "" for no title.
<code>x_trans</code>	For a numeric x variable, a transformation object (e.g. <code>"log10"</code> , <code>"sqrt"</code> or <code>"reverse"</code>).

<code>y_breaks</code>	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
<code>y_expand</code>	Padding to the limits with the <code>ggplot2::expansion</code> function, or a vector of length 2 (e.g. <code>c(0, 0)</code>).
<code>y_gridlines</code>	TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.
<code>y_include</code>	For a continuous y variable, any values that the limits should encompass (e.g. 0).
<code>y_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
<code>y_limits</code>	A vector of length 2 to determine the limits of the axis.
<code>y_oob</code>	For a continuous y variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
<code>y_sec_axis</code>	A secondary axis using the <code>ggplot2::sec_axis</code> or <code>ggplot2::dup_axis</code> function.
<code>y_title</code>	Axis title string. Use "" for no title.
<code>y_trans</code>	For a numeric y variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
<code>col_breaks</code>	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
<code>col_continuous</code>	For a continuous col variable, the type of colouring. Either "gradient" or "steps". Defaults to "gradient".
<code>col_include</code>	For a continuous col variable, any values that the limits should encompass (e.g. 0).
<code>col_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
<code>col_legend_place</code>	The place for the legend. Either "bottom", "right", "top" or "left". Or just the first letter of each.
<code>col_legend_ncol</code>	The number of columns for the legend elements.
<code>col_legend_nrow</code>	The number of rows for the legend elements.
<code>col_legend_rev</code>	Reverse the elements of the legend. Defaults to FALSE.
<code>col_limits</code>	A vector to determine the limits of the colour scale.
<code>col_oob</code>	For a continuous col variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
<code>col_rescale</code>	For a continuous col variable, a <code>scales::rescale</code> function.
<code>col_title</code>	Legend title string. Use "" for no title.
<code>col_trans</code>	For a numeric col variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
<code>facet_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a named vector of labels (e.g. <code>c("value" = "label", ...)</code>).
<code>facet_ncol</code>	The number of columns of facets. Only applies to a facet layout of "wrap".

facet_nrow	The number of rows of facets. Only applies to a facet layout of "wrap".
facet_scales	Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
facet_space	Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".
facet_layout	Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or facet2) argument is provided, then defaults to "wrap". If NULL and both facet and facet2 arguments are provided, defaults to "grid".
facet_switch	Whether the facet layout is "grid", whether to switch the facet labels to the opposite side of the plot. Either "x", "y" or "both".
linetype_title	Legend title string. Use "" for no title.
shape_title	Legend title string. Use "" for no title.
size_title	Legend title string. Use "" for no title.
caption	Caption title string.
titles	A function to format unspecified titles. Defaults to snakecase::to_sentence_case.
theme	A ggplot2 theme.

Value

A ggplot object.

Examples

```
library(dplyr)

ggplot2::economics %>%
  mutate(unemploy_rate = unemploy / pop) %>%
  gg_path(
    x = unemploy_rate,
    y = psavert,
    x_title = "Unemployment rate",
    y_title = "Personal savings rate",
    y_include = 0
  )
```

gg_point

Point ggplot

Description

Create a point ggplot with a wrapper around ggplot2::geom_point(stat = "identity", ...).

Usage

```
gg_point(  
  data = NULL,  
  x = NULL,  
  y = NULL,  
  col = NULL,  
  facet = NULL,  
  facet2 = NULL,  
  group = NULL,  
  text = NULL,  
  mapping = NULL,  
  stat = "identity",  
  position = "identity",  
  coord = ggplot2::coord_cartesian(clip = "off"),  
  pal = NULL,  
  pal_na = pal_grey,  
  alpha = 1,  
  ...,  
  title = NULL,  
  subtitle = NULL,  
  x_breaks = NULL,  
  x_expand = NULL,  
  x_gridlines = NULL,  
  x_include = NULL,  
  x_labels = NULL,  
  x_limits = NULL,  
  x_oob = scales::oob_keep,  
  x_sec_axis = ggplot2::waiver(),  
  x_title = NULL,  
  x_trans = "identity",  
  y_breaks = NULL,  
  y_expand = NULL,  
  y_gridlines = NULL,  
  y_include = NULL,  
  y_labels = NULL,  
  y_limits = NULL,  
  y_oob = scales::oob_keep,  
  y_sec_axis = ggplot2::waiver(),  
  y_title = NULL,  
  y_trans = "identity",  
  col_breaks = NULL,  
  col_continuous = "gradient",  
  col_include = NULL,  
  col_labels = NULL,  
  col_legend_place = NULL,  
  col_legend_ncol = NULL,  
  col_legend_nrow = NULL,  
  col_legend_rev = FALSE,
```



```

col_limits = NULL,
col_oob = scales::oob_keep,
col_rescale = scales::rescale(),
col_title = NULL,
col_trans = "identity",
facet_labels = NULL,
facet_ncol = NULL,
facet_nrow = NULL,
facet_scales = "fixed",
facet_space = "fixed",
facet_layout = NULL,
facet_switch = NULL,
linetype_title = NULL,
shape_title = NULL,
size_title = NULL,
caption = NULL,
titles = snakecase::to_sentence_case,
theme = NULL
)

```

Arguments

data	A data frame or tibble.
x	Unquoted x aesthetic variable.
y	Unquoted y aesthetic variable.
col	Unquoted col and fill aesthetic variable.
facet	Unquoted facet aesthetic variable.
facet2	Unquoted second facet variable.
group	Unquoted group aesthetic variable.
text	Unquoted text aesthetic variable.
mapping	Map additional aesthetics using the <code>ggplot2::aes</code> function (e.g. <code>shape</code>). Excludes colour, fill or alpha.
stat	A <code>ggplot2</code> character string stat.
position	Position adjustment. Either a character string (e.g. <code>"identity"</code>), or a function (e.g. <code>ggplot2::position_identity()</code>).
coord	A coordinate function from <code>ggplot2</code> (e.g. <code>ggplot2::coord_cartesian(clip = "off")</code>).
pal	Colours to use. A character vector of hex codes (or names).
pal_na	Colour to use for NA values. A character vector of a hex code (or name).
alpha	Opacity. A number between 0 and 1.
...	Other arguments passed to the <code>ggplot2::geom_point</code> function.
title	Title string.
subtitle	Subtitle string.
x_breaks	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.

x_expand	Padding to the limits with the <code>ggplot2::expansion</code> function, or a vector of length 2 (e.g. <code>c(0, 0)</code>).
x_gridlines	TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.
x_include	For a continuous x variable, any values that the limits should encompass (e.g. 0).
x_labels	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
x_limits	A vector of length 2 to determine the limits of the axis.
x_oob	For a continuous x variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
x_sec_axis	A secondary axis using the <code>ggplot2::sec_axis</code> or <code>ggplot2::dup_axis</code> function.
x_title	Axis title string. Use "" for no title.
x_trans	For a numeric x variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
y_breaks	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
y_expand	Padding to the limits with the <code>ggplot2::expansion</code> function, or a vector of length 2 (e.g. <code>c(0, 0)</code>).
y_gridlines	TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.
y_include	For a continuous y variable, any values that the limits should encompass (e.g. 0).
y_labels	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
y_limits	A vector of length 2 to determine the limits of the axis.
y_oob	For a continuous y variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
y_sec_axis	A secondary axis using the <code>ggplot2::sec_axis</code> or <code>ggplot2::dup_axis</code> function.
y_title	Axis title string. Use "" for no title.
y_trans	For a numeric y variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
col_breaks	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
col_continuous	For a continuous col variable, the type of colouring. Either "gradient" or "steps". Defaults to "gradient".
col_include	For a continuous col variable, any values that the limits should encompass (e.g. 0).
col_labels	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
col_legend_place	The place for the legend. Either "bottom", "right", "top" or "left". Or just the first letter of each.

<code>col_legend_ncol</code>	The number of columns for the legend elements.
<code>col_legend_nrow</code>	The number of rows for the legend elements.
<code>col_legend_rev</code>	Reverse the elements of the legend. Defaults to FALSE.
<code>col_limits</code>	A vector to determine the limits of the colour scale.
<code>col_oob</code>	For a continuous col variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
<code>col_rescale</code>	For a continuous col variable, a <code>scales::rescale</code> function.
<code>col_title</code>	Legend title string. Use "" for no title.
<code>col_trans</code>	For a numeric col variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
<code>facet_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a named vector of labels (e.g. <code>c("value" = "label", ...)</code>).
<code>facet_ncol</code>	The number of columns of facets. Only applies to a facet layout of "wrap".
<code>facet_nrow</code>	The number of rows of facets. Only applies to a facet layout of "wrap".
<code>facet_scales</code>	Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
<code>facet_space</code>	Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".
<code>facet_layout</code>	Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or <code>facet2</code>) argument is provided, then defaults to "wrap". If NULL and both <code>facet</code> and <code>facet2</code> arguments are provided, defaults to "grid".
<code>facet_switch</code>	Whether the facet layout is "grid", whether to switch the facet labels to the opposite side of the plot. Either "x", "y" or "both".
<code>linetype_title</code>	Legend title string. Use "" for no title.
<code>shape_title</code>	Legend title string. Use "" for no title.
<code>size_title</code>	Legend title string. Use "" for no title.
<code>caption</code>	Caption title string.
<code>titles</code>	A function to format unspecified titles. Defaults to <code>snakecase::to_sentence_case</code> .
<code>theme</code>	A <code>ggplot2</code> theme.

Value

A `ggplot` object.

Examples

```
library(palmerpenguins)

penguins |>
  gg_point(
    x = flipper_length_mm,
    y = body_mass_g,
    col = sex,
    facet = species,
    col_labels = stringr::str_to_sentence,
    pal = c("#1B9E77", "#9E361B")
  )
```

gg_pointrange

Pointrange ggplot

Description

Create a pointrange ggplot with a wrapper around `ggplot2::geom_pointrange(stat = "identity", ...)`.

Usage

```
gg_pointrange(
  data = NULL,
  x = NULL,
  xmin = NULL,
  xmax = NULL,
  y = NULL,
  ymin = NULL,
  ymax = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  text = NULL,
  mapping = NULL,
  stat = "identity",
  position = "identity",
  coord = ggplot2::coord_cartesian(clip = "off"),
  pal = NULL,
  pal_na = pal_grey,
  alpha = 1,
  ...,
  title = NULL,
  subtitle = NULL,
  x_breaks = NULL,
```

```
x_expand = NULL,  
x_gridlines = NULL,  
x_include = NULL,  
x_labels = NULL,  
x_limits = NULL,  
x_oob = scales::oob_keep,  
x_sec_axis = ggplot2::waiver(),  
x_title = NULL,  
x_trans = "identity",  
y_breaks = NULL,  
y_expand = NULL,  
y_gridlines = NULL,  
y_include = NULL,  
y_labels = NULL,  
y_limits = NULL,  
y_oob = scales::oob_keep,  
y_sec_axis = ggplot2::waiver(),  
y_title = NULL,  
y_trans = "identity",  
col_breaks = NULL,  
col_continuous = "gradient",  
col_include = NULL,  
col_labels = NULL,  
col_legend_place = NULL,  
col_legend_ncol = NULL,  
col_legend_nrow = NULL,  
col_legend_rev = FALSE,  
col_limits = NULL,  
col_oob = scales::oob_keep,  
col_rescale = scales::rescale(),  
col_title = NULL,  
col_trans = "identity",  
facet_labels = NULL,  
facet_ncol = NULL,  
facet_nrow = NULL,  
facet_scales = "fixed",  
facet_space = "fixed",  
facet_layout = NULL,  
facet_switch = NULL,  
linetype_title = NULL,  
shape_title = NULL,  
size_title = NULL,  
caption = NULL,  
titles = snakecase::to_sentence_case,  
theme = NULL  
)
```

Arguments

<code>data</code>	A data frame or tibble.
<code>x</code>	Unquoted x aesthetic variable.
<code>xmin</code>	Unquoted xmin aesthetic variable.
<code>xmax</code>	Unquoted xmax aesthetic variable.
<code>y</code>	Unquoted y aesthetic variable.
<code>ymin</code>	Unquoted ymin aesthetic variable.
<code>ymax</code>	Unquoted ymax aesthetic variable.
<code>col</code>	Unquoted col and fill aesthetic variable.
<code>facet</code>	Unquoted facet aesthetic variable.
<code>facet2</code>	Unquoted second facet variable.
<code>group</code>	Unquoted group aesthetic variable.
<code>text</code>	Unquoted text aesthetic variable.
<code>mapping</code>	Map additional aesthetics using the <code>ggplot2::aes</code> function (e.g. <code>shape</code>). Excludes colour, fill or alpha.
<code>stat</code>	A <code>ggplot2</code> character string stat.
<code>position</code>	Position adjustment. Either a character string (e.g. <code>"identity"</code>), or a function (e.g. <code>ggplot2::position_identity()</code>).
<code>coord</code>	A coordinate function from <code>ggplot2</code> (e.g. <code>ggplot2::coord_cartesian(clip = "off")</code>).
<code>pal</code>	Colours to use. A character vector of hex codes (or names).
<code>pal_na</code>	Colour to use for NA values. A character vector of a hex code (or name).
<code>alpha</code>	Opacity. A number between 0 and 1.
<code>...</code>	Other arguments passed to the <code>ggplot2::geom_pointrange</code> function.
<code>title</code>	Title string.
<code>subtitle</code>	Subtitle string.
<code>x_breaks</code>	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
<code>x_expand</code>	Padding to the limits with the <code>ggplot2::expansion</code> function, or a vector of length 2 (e.g. <code>c(0, 0)</code>).
<code>x_gridlines</code>	TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.
<code>x_include</code>	For a continuous x variable, any values that the limits should encompass (e.g. 0).
<code>x_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
<code>x_limits</code>	A vector of length 2 to determine the limits of the axis.
<code>x_oob</code>	For a continuous x variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
<code>x_sec_axis</code>	A secondary axis using the <code>ggplot2::sec_axis</code> or <code>ggplot2::dup_axis</code> function.
<code>x_title</code>	Axis title string. Use <code>""</code> for no title.

<code>x_trans</code>	For a numeric x variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
<code>y_breaks</code>	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
<code>y_expand</code>	Padding to the limits with the <code>ggplot2::expansion</code> function, or a vector of length 2 (e.g. <code>c(0, 0)</code>).
<code>y_gridlines</code>	TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.
<code>y_include</code>	For a continuous y variable, any values that the limits should encompass (e.g. 0).
<code>y_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
<code>y_limits</code>	A vector of length 2 to determine the limits of the axis.
<code>y_oob</code>	For a continuous y variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
<code>y_sec_axis</code>	A secondary axis using the <code>ggplot2::sec_axis</code> or <code>ggplot2::dup_axis</code> function.
<code>y_title</code>	Axis title string. Use "" for no title.
<code>y_trans</code>	For a numeric y variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
<code>col_breaks</code>	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
<code>col_continuous</code>	For a continuous col variable, the type of colouring. Either "gradient" or "steps". Defaults to "gradient".
<code>col_include</code>	For a continuous col variable, any values that the limits should encompass (e.g. 0).
<code>col_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
<code>col_legend_place</code>	The place for the legend. Either "bottom", "right", "top" or "left". Or just the first letter of each.
<code>col_legend_ncol</code>	The number of columns for the legend elements.
<code>col_legend_nrow</code>	The number of rows for the legend elements.
<code>col_legend_rev</code>	Reverse the elements of the legend. Defaults to FALSE.
<code>col_limits</code>	A vector to determine the limits of the colour scale.
<code>col_oob</code>	For a continuous col variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
<code>col_rescale</code>	For a continuous col variable, a <code>scales::rescale</code> function.
<code>col_title</code>	Legend title string. Use "" for no title.
<code>col_trans</code>	For a numeric col variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
<code>facet_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a named vector of labels (e.g. <code>c("value" = "label", ...)</code>).

facet_ncol	The number of columns of facets. Only applies to a facet layout of "wrap".
facet_nrow	The number of rows of facets. Only applies to a facet layout of "wrap".
facet_scales	Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
facet_space	Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".
facet_layout	Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or facet2) argument is provided, then defaults to "wrap". If NULL and both facet and facet2 arguments are provided, defaults to "grid".
facet_switch	Whether the facet layout is "grid", whether to switch the facet labels to the opposite side of the plot. Either "x", "y" or "both".
linetype_title	Legend title string. Use "" for no title.
shape_title	Legend title string. Use "" for no title.
size_title	Legend title string. Use "" for no title.
caption	Caption title string.
titles	A function to format unspecified titles. Defaults to snakecase::to_sentence_case.
theme	A ggplot2 theme.

Value

A ggplot object.

Examples

```
data.frame(
  trt = factor(c(1, 1, 2, 2)),
  resp = c(1, 5, 3, 4),
  group = factor(c(1, 2, 1, 2)),
  upper = c(1.1, 5.3, 3.3, 4.2),
  lower = c(0.8, 4.6, 2.4, 3.6)
) |>
gg_pointrange(
  x = trt,
  y = resp,
  col = group,
  ymin = lower,
  ymax = upper,
  position = ggplot2::position_dodge(width = 0.2),
  size = 0.2,
  pal = c("#1B9E77", "#9E361B"),
  x_title = "Treatment",
  y_title = "Response"
)
```

`gg_polygon`*Polygon ggplot*

Description

Create a polygon ggplot with a wrapper around `ggplot2::geom_polygon(stat = "identity", ...)`.

Usage

```
gg_polygon(  
  data = NULL,  
  x = NULL,  
  y = NULL,  
  col = NULL,  
  facet = NULL,  
  facet2 = NULL,  
  group = NULL,  
  subgroup = NULL,  
  text = NULL,  
  mapping = NULL,  
  stat = "identity",  
  position = "identity",  
  coord = ggplot2::coord_cartesian(clip = "off"),  
  pal = NULL,  
  pal_na = pal_grey,  
  alpha = 0.9,  
  ...,  
  title = NULL,  
  subtitle = NULL,  
  x_breaks = NULL,  
  x_expand = NULL,  
  x_gridlines = NULL,  
  x_include = NULL,  
  x_labels = NULL,  
  x_limits = NULL,  
  x_oob = scales::oob_keep,  
  x_sec_axis = ggplot2::waiver(),  
  x_title = NULL,  
  x_trans = "identity",  
  y_breaks = NULL,  
  y_expand = NULL,  
  y_gridlines = NULL,  
  y_include = NULL,  
  y_labels = NULL,  
  y_limits = NULL,  
  y_oob = scales::oob_keep,  
  y_sec_axis = ggplot2::waiver(),
```

```

y_title = NULL,
y_trans = "identity",
col_breaks = NULL,
col_continuous = "gradient",
col_include = NULL,
col_labels = NULL,
col_legend_place = NULL,
col_legend_ncol = NULL,
col_legend_nrow = NULL,
col_legend_rev = FALSE,
col_limits = NULL,
col_oob = scales::oob_keep,
col_rescale = scales::rescale(),
col_title = NULL,
col_trans = "identity",
facet_labels = NULL,
facet_ncol = NULL,
facet_nrow = NULL,
facet_scales = "fixed",
facet_space = "fixed",
facet_layout = NULL,
facet_switch = NULL,
linetype_title = NULL,
shape_title = NULL,
size_title = NULL,
caption = NULL,
titles = snakecase::to_sentence_case,
theme = NULL
)

```

Arguments

<code>data</code>	A data frame or tibble.
<code>x</code>	Unquoted x aesthetic variable.
<code>y</code>	Unquoted y aesthetic variable.
<code>col</code>	Unquoted col and fill aesthetic variable.
<code>facet</code>	Unquoted facet aesthetic variable.
<code>facet2</code>	Unquoted second facet variable.
<code>group</code>	Unquoted group aesthetic variable.
<code>subgroup</code>	Unquoted subgroup aesthetic variable.
<code>text</code>	Unquoted text aesthetic variable.
<code>mapping</code>	Map additional aesthetics using the <code>ggplot2::aes</code> function (e.g. <code>shape</code>). Excludes colour, fill or alpha.
<code>stat</code>	A <code>ggplot2</code> character string stat.
<code>position</code>	Position adjustment. Either a character string (e.g. <code>"identity"</code>), or a function (e.g. <code>ggplot2::position_identity()</code>).

coord	A coordinate function from ggplot2 (e.g. ggplot2::coord_cartesian(clip = "off")).
pal	Colours to use. A character vector of hex codes (or names).
pal_na	Colour to use for NA values. A character vector of a hex code (or name).
alpha	Opacity. A number between 0 and 1.
...	Other arguments passed to the ggplot2::geom_polygon function.
title	Title string.
subtitle	Subtitle string.
x_breaks	A scales::breaks_* function (e.g. scales::breaks_pretty()), or a vector of breaks.
x_expand	Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
x_gridlines	TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.
x_include	For a continuous x variable, any values that the limits should encompass (e.g. 0).
x_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
x_limits	A vector of length 2 to determine the limits of the axis.
x_oob	For a continuous x variable, a scales::oob_* function of how to handle values outside of limits (e.g. scales::oob_keep). Defaults to scales::oob_keep.
x_sec_axis	A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
x_title	Axis title string. Use "" for no title.
x_trans	For a numeric x variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
y_breaks	A scales::breaks_* function (e.g. scales::breaks_pretty()), or a vector of breaks.
y_expand	Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
y_gridlines	TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.
y_include	For a continuous y variable, any values that the limits should encompass (e.g. 0).
y_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
y_limits	A vector of length 2 to determine the limits of the axis.
y_oob	For a continuous y variable, a scales::oob_* function of how to handle values outside of limits (e.g. scales::oob_keep). Defaults to scales::oob_keep.
y_sec_axis	A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
y_title	Axis title string. Use "" for no title.
y_trans	For a numeric y variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
col_breaks	A scales::breaks_* function (e.g. scales::breaks_pretty()), or a vector of breaks.

<code>col_continuous</code>	For a continuous col variable, the type of colouring. Either "gradient" or "steps". Defaults to "gradient".
<code>col_include</code>	For a continuous col variable, any values that the limits should encompass (e.g. 0).
<code>col_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
<code>col_legend_place</code>	The place for the legend. Either "bottom", "right", "top" or "left". Or just the first letter of each.
<code>col_legend_ncol</code>	The number of columns for the legend elements.
<code>col_legend_nrow</code>	The number of rows for the legend elements.
<code>col_legend_rev</code>	Reverse the elements of the legend. Defaults to FALSE.
<code>col_limits</code>	A vector to determine the limits of the colour scale.
<code>col_oob</code>	For a continuous col variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
<code>col_rescale</code>	For a continuous col variable, a <code>scales::rescale</code> function.
<code>col_title</code>	Legend title string. Use "" for no title.
<code>col_trans</code>	For a numeric col variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
<code>facet_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a named vector of labels (e.g. <code>c("value" = "label", ...)</code>).
<code>facet_ncol</code>	The number of columns of facets. Only applies to a facet layout of "wrap".
<code>facet_nrow</code>	The number of rows of facets. Only applies to a facet layout of "wrap".
<code>facet_scales</code>	Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
<code>facet_space</code>	Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".
<code>facet_layout</code>	Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or facet2) argument is provided, then defaults to "wrap". If NULL and both facet and facet2 arguments are provided, defaults to "grid".
<code>facet_switch</code>	Whether the facet layout is "grid", whether to switch the facet labels to the opposite side of the plot. Either "x", "y" or "both".
<code>linetype_title</code>	Legend title string. Use "" for no title.
<code>shape_title</code>	Legend title string. Use "" for no title.
<code>size_title</code>	Legend title string. Use "" for no title.
<code>caption</code>	Caption title string.
<code>titles</code>	A function to format unspecified titles. Defaults to <code>snakecase::to_sentence_case</code> .
<code>theme</code>	A ggplot2 theme.

Value

A ggplot object.

Examples

```
ids <- factor(c("1.1", "2.1", "1.2", "2.2", "1.3", "2.3"))

values <- data.frame(
  id = ids,
  value = c(3, 3.1, 3.1, 3.2, 3.15, 3.5)
)

positions <- data.frame(
  id = rep(ids, each = 4),
  x = c(2, 1, 1.1, 2.2, 1, 0, 0.3, 1.1, 2.2, 1.1, 1.2, 2.5, 1.1, 0.3,
        0.5, 1.2, 2.5, 1.2, 1.3, 2.7, 1.2, 0.5, 0.6, 1.3),
  y = c(-0.5, 0, 1, 0.5, 0, 0.5, 1.5, 1, 0.5, 1, 2.1, 1.7, 1, 1.5,
        2.2, 2.1, 1.7, 2.1, 3.2, 2.8, 2.1, 2.2, 3.3, 3.2)
)

datapoly <- merge(values, positions, by = c("id"))

datapoly %>%
  gg_polygon(
    x = x,
    y = y,
    col = value,
    group = id,
    pal = viridis::cividis(9)
  )
```

gg_qq

Qq ggplot

Description

Create a qq ggplot with a wrapper around `ggplot2::geom_qq(stat = "qq", ...)`.

Usage

```
gg_qq(
  data = NULL,
  sample = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  text = NULL,
```

```
x = NULL,
y = NULL,
mapping = NULL,
stat = "qq",
position = "identity",
coord = ggplot2::coord_cartesian(clip = "off"),
pal = NULL,
pal_na = pal_grey,
alpha = 1,
...,
title = NULL,
subtitle = NULL,
x_breaks = NULL,
x_expand = NULL,
x_gridlines = NULL,
x_include = NULL,
x_labels = NULL,
x_limits = NULL,
x_oob = scales::oob_keep,
x_sec_axis = ggplot2::waiver(),
x_title = NULL,
x_trans = "identity",
y_breaks = NULL,
y_expand = NULL,
y_gridlines = NULL,
y_include = NULL,
y_labels = NULL,
y_limits = NULL,
y_oob = scales::oob_keep,
y_sec_axis = ggplot2::waiver(),
y_title = NULL,
y_trans = "identity",
col_breaks = NULL,
col_continuous = "gradient",
col_include = NULL,
col_labels = NULL,
col_legend_place = NULL,
col_legend_ncol = NULL,
col_legend_nrow = NULL,
col_legend_rev = FALSE,
col_limits = NULL,
col_oob = scales::oob_keep,
col_rescale = scales::rescale(),
col_title = NULL,
col_trans = "identity",
facet_labels = NULL,
facet_ncol = NULL,
facet_nrow = NULL,
```

```

facet_scales = "fixed",
facet_space = "fixed",
facet_layout = NULL,
facet_switch = NULL,
linetype_title = NULL,
shape_title = NULL,
size_title = NULL,
caption = NULL,
titles = snakecase::to_sentence_case,
theme = NULL
)

```

Arguments

<code>data</code>	A data frame or tibble.
<code>sample</code>	Unquoted sample aesthetic variable.
<code>col</code>	Unquoted col and fill aesthetic variable.
<code>facet</code>	Unquoted facet aesthetic variable.
<code>facet2</code>	Unquoted second facet variable.
<code>group</code>	Unquoted group aesthetic variable.
<code>text</code>	Unquoted text aesthetic variable.
<code>x</code>	Unquoted x aesthetic variable.
<code>y</code>	Unquoted y aesthetic variable.
<code>mapping</code>	Map additional aesthetics using the <code>ggplot2::aes</code> function (e.g. <code>shape</code>). Excludes colour, fill or alpha.
<code>stat</code>	A <code>ggplot2</code> character string stat.
<code>position</code>	Position adjustment. Either a character string (e.g. <code>"identity"</code>), or a function (e.g. <code>ggplot2::position_identity()</code>).
<code>coord</code>	A coordinate function from <code>ggplot2</code> (e.g. <code>ggplot2::coord_cartesian(clip = "off")</code>).
<code>pal</code>	Colours to use. A character vector of hex codes (or names).
<code>pal_na</code>	Colour to use for NA values. A character vector of a hex code (or name).
<code>alpha</code>	Opacity. A number between 0 and 1.
<code>...</code>	Other arguments passed to the <code>ggplot2::geom_qq</code> function.
<code>title</code>	Title string.
<code>subtitle</code>	Subtitle string.
<code>x_breaks</code>	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
<code>x_expand</code>	Padding to the limits with the <code>ggplot2::expansion</code> function, or a vector of length 2 (e.g. <code>c(0, 0)</code>).
<code>x_gridlines</code>	TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.
<code>x_include</code>	For a continuous x variable, any values that the limits should encompass (e.g. 0).

<code>x_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
<code>x_limits</code>	A vector of length 2 to determine the limits of the axis.
<code>x_oob</code>	For a continuous x variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
<code>x_sec_axis</code>	A secondary axis using the <code>ggplot2::sec_axis</code> or <code>ggplot2::dup_axis</code> function.
<code>x_title</code>	Axis title string. Use "" for no title.
<code>x_trans</code>	For a numeric x variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
<code>y_breaks</code>	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
<code>y_expand</code>	Padding to the limits with the <code>ggplot2::expansion</code> function, or a vector of length 2 (e.g. <code>c(0, 0)</code>).
<code>y_gridlines</code>	TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.
<code>y_include</code>	For a continuous y variable, any values that the limits should encompass (e.g. 0).
<code>y_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
<code>y_limits</code>	A vector of length 2 to determine the limits of the axis.
<code>y_oob</code>	For a continuous y variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
<code>y_sec_axis</code>	A secondary axis using the <code>ggplot2::sec_axis</code> or <code>ggplot2::dup_axis</code> function.
<code>y_title</code>	Axis title string. Use "" for no title.
<code>y_trans</code>	For a numeric y variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
<code>col_breaks</code>	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
<code>col_continuous</code>	For a continuous col variable, the type of colouring. Either "gradient" or "steps". Defaults to "gradient".
<code>col_include</code>	For a continuous col variable, any values that the limits should encompass (e.g. 0).
<code>col_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
<code>col_legend_place</code>	The place for the legend. Either "bottom", "right", "top" or "left". Or just the first letter of each.
<code>col_legend_ncol</code>	The number of columns for the legend elements.
<code>col_legend_nrow</code>	The number of rows for the legend elements.
<code>col_legend_rev</code>	Reverse the elements of the legend. Defaults to FALSE.
<code>col_limits</code>	A vector to determine the limits of the colour scale.

<code>col_oob</code>	For a continuous col variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
<code>col_rescale</code>	For a continuous col variable, a <code>scales::rescale</code> function.
<code>col_title</code>	Legend title string. Use "" for no title.
<code>col_trans</code>	For a numeric col variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
<code>facet_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a named vector of labels (e.g. <code>c("value" = "label", ...)</code>).
<code>facet_ncol</code>	The number of columns of facets. Only applies to a facet layout of "wrap".
<code>facet_nrow</code>	The number of rows of facets. Only applies to a facet layout of "wrap".
<code>facet_scales</code>	Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
<code>facet_space</code>	Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".
<code>facet_layout</code>	Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or facet2) argument is provided, then defaults to "wrap". If NULL and both facet and facet2 arguments are provided, defaults to "grid".
<code>facet_switch</code>	Whether the facet layout is "grid", whether to switch the facet labels to the opposite side of the plot. Either "x", "y" or "both".
<code>linetype_title</code>	Legend title string. Use "" for no title.
<code>shape_title</code>	Legend title string. Use "" for no title.
<code>size_title</code>	Legend title string. Use "" for no title.
<code>caption</code>	Caption title string.
<code>titles</code>	A function to format unspecified titles. Defaults to <code>snakecase::to_sentence_case</code> .
<code>theme</code>	A <code>ggplot2</code> theme.

Value

A `ggplot` object.

Examples

```
library(palmerpenguins)

penguins |>
  gg_qq(
    sample = body_mass_g,
    facet = species,
    pal = "#1B9E77",
    coord = ggplot2::coord_cartesian(clip = "on")
  ) +
  ggplot2::geom_qq_line(alpha = 0.5)
```

`gg_raster`*Raster ggplot*

Description

Create a raster ggplot with a wrapper around `ggplot2::geom_raster(stat = "identity", ...)`.

Usage

```
gg_raster(  
  data = NULL,  
  x = NULL,  
  y = NULL,  
  col = NULL,  
  facet = NULL,  
  facet2 = NULL,  
  group = NULL,  
  text = NULL,  
  mapping = NULL,  
  stat = "identity",  
  position = "identity",  
  coord = ggplot2::coord_cartesian(clip = "off"),  
  pal = NULL,  
  pal_na = pal_grey,  
  alpha = 0.9,  
  ...,  
  title = NULL,  
  subtitle = NULL,  
  x_breaks = NULL,  
  x_expand = c(0, 0),  
  x_gridlines = NULL,  
  x_include = NULL,  
  x_labels = NULL,  
  x_limits = c(NA, NA),  
  x_oob = scales::oob_keep,  
  x_sec_axis = ggplot2::waiver(),  
  x_title = NULL,  
  x_trans = "identity",  
  y_breaks = NULL,  
  y_expand = c(0, 0),  
  y_gridlines = NULL,  
  y_include = NULL,  
  y_labels = NULL,  
  y_limits = c(NA, NA),  
  y_oob = scales::oob_keep,  
  y_sec_axis = ggplot2::waiver(),  
  y_title = NULL,  
)
```

```

y_trans = "identity",
col_breaks = NULL,
col_continuous = "gradient",
col_include = NULL,
col_labels = NULL,
col_legend_place = NULL,
col_legend_ncol = NULL,
col_legend_nrow = NULL,
col_legend_rev = FALSE,
col_limits = NULL,
col_oob = scales::oob_keep,
col_rescale = scales::rescale(),
col_title = NULL,
col_trans = "identity",
facet_labels = NULL,
facet_ncol = NULL,
facet_nrow = NULL,
facet_scales = "fixed",
facet_space = "fixed",
facet_layout = NULL,
facet_switch = NULL,
linetype_title = NULL,
shape_title = NULL,
size_title = NULL,
caption = NULL,
titles = snakecase::to_sentence_case,
theme = NULL
)

```

Arguments

data	A data frame or tibble.
x	Unquoted x aesthetic variable.
y	Unquoted y aesthetic variable.
col	Unquoted col and fill aesthetic variable.
facet	Unquoted facet aesthetic variable.
facet2	Unquoted second facet variable.
group	Unquoted group aesthetic variable.
text	Unquoted text aesthetic variable.
mapping	Map additional aesthetics using the <code>ggplot2::aes</code> function (e.g. <code>shape</code>). Excludes colour, fill or alpha.
stat	A <code>ggplot2</code> character string stat.
position	Position adjustment. Either a character string (e.g. <code>"identity"</code>), or a function (e.g. <code>ggplot2::position_identity()</code>).
coord	A coordinate function from <code>ggplot2</code> (e.g. <code>ggplot2::coord_cartesian(clip = "off")</code>).

<code>pal</code>	Colours to use. A character vector of hex codes (or names).
<code>pal_na</code>	Colour to use for NA values. A character vector of a hex code (or name).
<code>alpha</code>	Opacity. A number between 0 and 1.
<code>...</code>	Other arguments passed to the <code>ggplot2::geom_raster</code> function.
<code>title</code>	Title string.
<code>subtitle</code>	Subtitle string.
<code>x_breaks</code>	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
<code>x_expand</code>	Padding to the limits with the <code>ggplot2::expansion</code> function, or a vector of length 2 (e.g. <code>c(0, 0)</code>).
<code>x_gridlines</code>	TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.
<code>x_include</code>	For a continuous x variable, any values that the limits should encompass (e.g. 0).
<code>x_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
<code>x_limits</code>	A vector of length 2 to determine the limits of the axis.
<code>x_oob</code>	For a continuous x variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
<code>x_sec_axis</code>	A secondary axis using the <code>ggplot2::sec_axis</code> or <code>ggplot2::dup_axis</code> function.
<code>x_title</code>	Axis title string. Use "" for no title.
<code>x_trans</code>	For a numeric x variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
<code>y_breaks</code>	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
<code>y_expand</code>	Padding to the limits with the <code>ggplot2::expansion</code> function, or a vector of length 2 (e.g. <code>c(0, 0)</code>).
<code>y_gridlines</code>	TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.
<code>y_include</code>	For a continuous y variable, any values that the limits should encompass (e.g. 0).
<code>y_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
<code>y_limits</code>	A vector of length 2 to determine the limits of the axis.
<code>y_oob</code>	For a continuous y variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
<code>y_sec_axis</code>	A secondary axis using the <code>ggplot2::sec_axis</code> or <code>ggplot2::dup_axis</code> function.
<code>y_title</code>	Axis title string. Use "" for no title.
<code>y_trans</code>	For a numeric y variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
<code>col_breaks</code>	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
<code>col_continuous</code>	For a continuous col variable, the type of colouring. Either "gradient" or "steps". Defaults to "gradient".

col_include	For a continuous col variable, any values that the limits should encompass (e.g. 0).
col_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
col_legend_place	The place for the legend. Either "bottom", "right", "top" or "left". Or just the first letter of each.
col_legend_ncol	The number of columns for the legend elements.
col_legend_nrow	The number of rows for the legend elements.
col_legend_rev	Reverse the elements of the legend. Defaults to FALSE.
col_limits	A vector to determine the limits of the colour scale.
col_oob	For a continuous col variable, a scales::oob_* function of how to handle values outside of limits (e.g. scales::oob_keep). Defaults to scales::oob_keep.
col_rescale	For a continuous col variable, a scales::rescale function.
col_title	Legend title string. Use "" for no title.
col_trans	For a numeric col variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
facet_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a named vector of labels (e.g. c("value" = "label", ...)).
facet_ncol	The number of columns of facets. Only applies to a facet layout of "wrap".
facet_nrow	The number of rows of facets. Only applies to a facet layout of "wrap".
facet_scales	Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "free".
facet_space	Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".
facet_layout	Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or facet2) argument is provided, then defaults to "wrap". If NULL and both facet and facet2 arguments are provided, defaults to "grid".
facet_switch	Whether the facet layout is "grid", whether to switch the facet labels to the opposite side of the plot. Either "x", "y" or "both".
linetype_title	Legend title string. Use "" for no title.
shape_title	Legend title string. Use "" for no title.
size_title	Legend title string. Use "" for no title.
caption	Caption title string.
titles	A function to format unspecified titles. Defaults to snakecase::to_sentence_case.
theme	A ggplot2 theme.

Value

A ggplot object.

Examples

```
ggplot2::faithfuld |>
  gg_raster(
    x = waiting,
    y = eruptions,
    col = density,
    pal = viridis::cividis(9)
  )
```

gg_rect

Rect ggplot

Description

Create a rect ggplot with a wrapper around `ggplot2::geom_rect(stat = "identity", ...)`.

Usage

```
gg_rect(
  data = NULL,
  xmin = NULL,
  xmax = NULL,
  ymin = NULL,
  ymax = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  text = NULL,
  mapping = NULL,
  stat = "identity",
  position = "identity",
  coord = ggplot2::coord_cartesian(clip = "off"),
  pal = NULL,
  pal_na = pal_grey,
  alpha = 0.9,
  ...,
  title = NULL,
  subtitle = NULL,
  x_breaks = NULL,
  x_expand = NULL,
  x_gridlines = NULL,
```

```

x_include = NULL,
x_labels = NULL,
x_limits = NULL,
x_oob = scales::oob_keep,
x_sec_axis = ggplot2::waiver(),
x_title = NULL,
x_trans = "identity",
y_breaks = NULL,
y_expand = NULL,
y_gridlines = NULL,
y_include = NULL,
y_labels = NULL,
y_limits = NULL,
y_oob = scales::oob_keep,
y_sec_axis = ggplot2::waiver(),
y_title = NULL,
y_trans = "identity",
col_breaks = NULL,
col_continuous = "gradient",
col_include = NULL,
col_labels = NULL,
col_legend_place = NULL,
col_legend_ncol = NULL,
col_legend_nrow = NULL,
col_legend_rev = FALSE,
col_limits = NULL,
col_oob = scales::oob_keep,
col_rescale = scales::rescale(),
col_title = NULL,
col_trans = "identity",
facet_labels = NULL,
facet_ncol = NULL,
facet_nrow = NULL,
facet_scales = "fixed",
facet_space = "fixed",
facet_layout = NULL,
facet_switch = NULL,
linetype_title = NULL,
shape_title = NULL,
size_title = NULL,
caption = NULL,
titles = snakecase::to_sentence_case,
theme = NULL
)

```

Arguments

`data` A data frame or tibble.

xmin	Unquoted xmin aesthetic variable.
xmax	Unquoted xmax aesthetic variable.
ymin	Unquoted ymin aesthetic variable.
ymax	Unquoted ymax aesthetic variable.
col	Unquoted col and fill aesthetic variable.
facet	Unquoted facet aesthetic variable.
facet2	Unquoted second facet variable.
group	Unquoted group aesthetic variable.
text	Unquoted text aesthetic variable.
mapping	Map additional aesthetics using the <code>ggplot2::aes</code> function (e.g. <code>shape</code>). Excludes colour, fill or alpha.
stat	A <code>ggplot2</code> character string stat.
position	Position adjustment. Either a character string (e.g. <code>"identity"</code>), or a function (e.g. <code>ggplot2::position_identity()</code>).
coord	A coordinate function from <code>ggplot2</code> (e.g. <code>ggplot2::coord_cartesian(clip = "off")</code>).
pal	Colours to use. A character vector of hex codes (or names).
pal_na	Colour to use for NA values. A character vector of a hex code (or name).
alpha	Opacity. A number between 0 and 1.
...	Other arguments passed to the <code>ggplot2::geom_rect</code> function.
title	Title string.
subtitle	Subtitle string.
x_breaks	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
x_expand	Padding to the limits with the <code>ggplot2::expansion</code> function, or a vector of length 2 (e.g. <code>c(0, 0)</code>).
x_gridlines	TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.
x_include	For a continuous x variable, any values that the limits should encompass (e.g. 0).
x_labels	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
x_limits	A vector of length 2 to determine the limits of the axis.
x_oob	For a continuous x variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
x_sec_axis	A secondary axis using the <code>ggplot2::sec_axis</code> or <code>ggplot2::dup_axis</code> function.
x_title	Axis title string. Use "" for no title.
x_trans	For a numeric x variable, a transformation object (e.g. <code>"log10"</code> , <code>"sqrt"</code> or <code>"reverse"</code>).
y_breaks	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
y_expand	Padding to the limits with the <code>ggplot2::expansion</code> function, or a vector of length 2 (e.g. <code>c(0, 0)</code>).

<code>y_gridlines</code>	TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.
<code>y_include</code>	For a continuous y variable, any values that the limits should encompass (e.g. 0).
<code>y_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
<code>y_limits</code>	A vector of length 2 to determine the limits of the axis.
<code>y_oob</code>	For a continuous y variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
<code>y_sec_axis</code>	A secondary axis using the <code>ggplot2::sec_axis</code> or <code>ggplot2::dup_axis</code> function.
<code>y_title</code>	Axis title string. Use "" for no title.
<code>y_trans</code>	For a numeric y variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
<code>col_breaks</code>	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
<code>col_continuous</code>	For a continuous col variable, the type of colouring. Either "gradient" or "steps". Defaults to "gradient".
<code>col_include</code>	For a continuous col variable, any values that the limits should encompass (e.g. 0).
<code>col_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
<code>col_legend_place</code>	The place for the legend. Either "bottom", "right", "top" or "left". Or just the first letter of each.
<code>col_legend_ncol</code>	The number of columns for the legend elements.
<code>col_legend_nrow</code>	The number of rows for the legend elements.
<code>col_legend_rev</code>	Reverse the elements of the legend. Defaults to FALSE.
<code>col_limits</code>	A vector to determine the limits of the colour scale.
<code>col_oob</code>	For a continuous col variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
<code>col_rescale</code>	For a continuous col variable, a <code>scales::rescale</code> function.
<code>col_title</code>	Legend title string. Use "" for no title.
<code>col_trans</code>	For a numeric col variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
<code>facet_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a named vector of labels (e.g. <code>c("value" = "label", ...)</code>).
<code>facet_ncol</code>	The number of columns of facets. Only applies to a facet layout of "wrap".
<code>facet_nrow</code>	The number of rows of facets. Only applies to a facet layout of "wrap".
<code>facet_scales</code>	Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".

facet_space	Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".
facet_layout	Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or facet2) argument is provided, then defaults to "wrap". If NULL and both facet and facet2 arguments are provided, defaults to "grid".
facet_switch	Whether the facet layout is "grid", whether to switch the facet labels to the opposite side of the plot. Either "x", "y" or "both".
linetype_title	Legend title string. Use "" for no title.
shape_title	Legend title string. Use "" for no title.
size_title	Legend title string. Use "" for no title.
caption	Caption title string.
titles	A function to format unspecified titles. Defaults to snakecase::to_sentence_case.
theme	A ggplot2 theme.

Value

A ggplot object.

Examples

```
data.frame(
  x = rep(c(2, 5, 7, 9, 12), 2),
  y = rep(c(1, 2), each = 5),
  z = factor(rep(1:5, each = 2)),
  w = rep(diff(c(0, 4, 6, 8, 10, 14)), 2)
) %>%
  dplyr::mutate(
    xmin = x - w / 2,
    xmax = x + w / 2,
    ymin = y,
    ymax = y + 1
  ) %>%
  gg_rect(
    xmin = xmin,
    xmax = xmax,
    ymin = ymin,
    ymax = ymax,
    col = z
  )
```

`gg_ribbon`*Ribbon ggplot*

Description

Create a ribbon ggplot with a wrapper around `ggplot2::geom_ribbon(stat = "identity", ...)`.

Usage

```
gg_ribbon(  
  data = NULL,  
  x = NULL,  
  y = NULL,  
  col = NULL,  
  facet = NULL,  
  facet2 = NULL,  
  group = NULL,  
  text = NULL,  
  xmin = NULL,  
  xmax = NULL,  
  ymin = NULL,  
  ymax = NULL,  
  mapping = NULL,  
  stat = "identity",  
  position = "identity",  
  coord = ggplot2::coord_cartesian(clip = "off"),  
  pal = NULL,  
  pal_na = pal_grey,  
  alpha = 0.5,  
  ...,  
  title = NULL,  
  subtitle = NULL,  
  x_breaks = NULL,  
  x_expand = NULL,  
  x_gridlines = NULL,  
  x_include = NULL,  
  x_labels = NULL,  
  x_limits = NULL,  
  x_oob = scales::oob_keep,  
  x_sec_axis = ggplot2::waiver(),  
  x_title = NULL,  
  x_trans = "identity",  
  y_breaks = NULL,  
  y_expand = NULL,  
  y_gridlines = NULL,  
  y_include = NULL,  
  y_labels = NULL,  
)
```

```

y_limits = NULL,
y_oob = scales::oob_keep,
y_sec_axis = ggplot2::waiver(),
y_title = NULL,
y_trans = "identity",
col_breaks = NULL,
col_continuous = "gradient",
col_include = NULL,
col_labels = NULL,
col_legend_place = NULL,
col_legend_ncol = NULL,
col_legend_nrow = NULL,
col_legend_rev = FALSE,
col_limits = NULL,
col_oob = scales::oob_keep,
col_rescale = scales::rescale(),
col_title = NULL,
col_trans = "identity",
facet_labels = NULL,
facet_ncol = NULL,
facet_nrow = NULL,
facet_scales = "fixed",
facet_space = "fixed",
facet_layout = NULL,
facet_switch = NULL,
linetype_title = NULL,
shape_title = NULL,
size_title = NULL,
caption = NULL,
titles = snakecase::to_sentence_case,
theme = NULL
)

```

Arguments

<code>data</code>	A data frame or tibble.
<code>x</code>	Unquoted x aesthetic variable.
<code>y</code>	Unquoted y aesthetic variable.
<code>col</code>	Unquoted col and fill aesthetic variable.
<code>facet</code>	Unquoted facet aesthetic variable.
<code>facet2</code>	Unquoted second facet variable.
<code>group</code>	Unquoted group aesthetic variable.
<code>text</code>	Unquoted text aesthetic variable.
<code>xmin</code>	Unquoted xmin aesthetic variable.
<code>xmax</code>	Unquoted xmax aesthetic variable.
<code>ymin</code>	Unquoted ymin aesthetic variable.

ymax	Unquoted ymax aesthetic variable.
mapping	Map additional aesthetics using the <code>ggplot2::aes</code> function (e.g. <code>shape</code>). Excludes colour, fill or alpha.
stat	A <code>ggplot2</code> character string stat.
position	Position adjustment. Either a character string (e.g. <code>"identity"</code>), or a function (e.g. <code>ggplot2::position_identity()</code>).
coord	A coordinate function from <code>ggplot2</code> (e.g. <code>ggplot2::coord_cartesian(clip = "off")</code>).
pal	Colours to use. A character vector of hex codes (or names).
pal_na	Colour to use for NA values. A character vector of a hex code (or name).
alpha	Opacity. A number between 0 and 1.
...	Other arguments passed to the <code>ggplot2::geom_ribbon</code> function.
title	Title string.
subtitle	Subtitle string.
x_breaks	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
x_expand	Padding to the limits with the <code>ggplot2::expansion</code> function, or a vector of length 2 (e.g. <code>c(0, 0)</code>).
x_gridlines	TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.
x_include	For a continuous x variable, any values that the limits should encompass (e.g. 0).
x_labels	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
x_limits	A vector of length 2 to determine the limits of the axis.
x_oob	For a continuous x variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
x_sec_axis	A secondary axis using the <code>ggplot2::sec_axis</code> or <code>ggplot2::dup_axis</code> function.
x_title	Axis title string. Use "" for no title.
x_trans	For a numeric x variable, a transformation object (e.g. <code>"log10"</code> , <code>"sqrt"</code> or <code>"reverse"</code>).
y_breaks	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
y_expand	Padding to the limits with the <code>ggplot2::expansion</code> function, or a vector of length 2 (e.g. <code>c(0, 0)</code>).
y_gridlines	TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.
y_include	For a continuous y variable, any values that the limits should encompass (e.g. 0).
y_labels	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
y_limits	A vector of length 2 to determine the limits of the axis.
y_oob	For a continuous y variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .

<code>y_sec_axis</code>	A secondary axis using the <code>ggplot2::sec_axis</code> or <code>ggplot2::dup_axis</code> function.
<code>y_title</code>	Axis title string. Use "" for no title.
<code>y_trans</code>	For a numeric y variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
<code>col_breaks</code>	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
<code>col_continuous</code>	For a continuous col variable, the type of colouring. Either "gradient" or "steps". Defaults to "gradient".
<code>col_include</code>	For a continuous col variable, any values that the limits should encompass (e.g. 0).
<code>col_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
<code>col_legend_place</code>	The place for the legend. Either "bottom", "right", "top" or "left". Or just the first letter of each.
<code>col_legend_ncol</code>	The number of columns for the legend elements.
<code>col_legend_nrow</code>	The number of rows for the legend elements.
<code>col_legend_rev</code>	Reverse the elements of the legend. Defaults to FALSE.
<code>col_limits</code>	A vector to determine the limits of the colour scale.
<code>col_oob</code>	For a continuous col variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
<code>col_rescale</code>	For a continuous col variable, a <code>scales::rescale</code> function.
<code>col_title</code>	Legend title string. Use "" for no title.
<code>col_trans</code>	For a numeric col variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
<code>facet_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a named vector of labels (e.g. <code>c("value" = "label", ...)</code>).
<code>facet_ncol</code>	The number of columns of facets. Only applies to a facet layout of "wrap".
<code>facet_nrow</code>	The number of rows of facets. Only applies to a facet layout of "wrap".
<code>facet_scales</code>	Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
<code>facet_space</code>	Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".
<code>facet_layout</code>	Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or <code>facet2</code>) argument is provided, then defaults to "wrap". If NULL and both <code>facet</code> and <code>facet2</code> arguments are provided, defaults to "grid".
<code>facet_switch</code>	Whether the facet layout is "grid", whether to switch the facet labels to the opposite side of the plot. Either "x", "y" or "both".
<code>linetype_title</code>	Legend title string. Use "" for no title.

shape_title	Legend title string. Use "" for no title.
size_title	Legend title string. Use "" for no title.
caption	Caption title string.
titles	A function to format unspecified titles. Defaults to snakecase::to_sentence_case.
theme	A ggplot2 theme.

Value

A ggplot object.

Examples

```
library(dplyr)
library(ggplot2)

data.frame(year = 1875:1972, level = as.vector(LakeHuron)) |>
  mutate(level_min = level - 1, level_max = level + 1) |>
  gg_ribbon(
    x = year,
    ymin = level_min,
    ymax = level_max,
    pal = scales::alpha("#1B9E77", 0),
    y_title = "Level"
  ) +
  geom_line(aes(x = year, y = level), col = "#1B9E77")
```

gg_segment

Segment ggplot

Description

Create a segment ggplot with a wrapper around ggplot2::geom_segment(stat = "identity", ...).

Usage

```
gg_segment(
  data = NULL,
  x = NULL,
  xend = NULL,
  y = NULL,
  yend = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  text = NULL,
```

```
mapping = NULL,  
stat = "identity",  
position = "identity",  
coord = ggplot2::coord_cartesian(clip = "off"),  
pal = NULL,  
pal_na = pal_grey,  
alpha = 1,  
...,  
title = NULL,  
subtitle = NULL,  
x_breaks = NULL,  
x_expand = NULL,  
x_gridlines = NULL,  
x_include = NULL,  
x_labels = NULL,  
x_limits = NULL,  
x_oob = scales::oob_keep,  
x_sec_axis = ggplot2::waiver(),  
x_title = NULL,  
x_trans = "identity",  
y_breaks = NULL,  
y_expand = NULL,  
y_gridlines = NULL,  
y_include = NULL,  
y_labels = NULL,  
y_limits = NULL,  
y_oob = scales::oob_keep,  
y_sec_axis = ggplot2::waiver(),  
y_title = NULL,  
y_trans = "identity",  
col_breaks = NULL,  
col_continuous = "gradient",  
col_include = NULL,  
col_labels = NULL,  
col_legend_place = NULL,  
col_legend_ncol = NULL,  
col_legend_nrow = NULL,  
col_legend_rev = FALSE,  
col_limits = NULL,  
col_oob = scales::oob_keep,  
col_rescale = scales::rescale(),  
col_title = NULL,  
col_trans = "identity",  
facet_labels = NULL,  
facet_ncol = NULL,  
facet_nrow = NULL,  
facet_scales = "fixed",  
facet_space = "fixed",
```



```

facet_layout = NULL,
facet_switch = NULL,
linetype_title = NULL,
shape_title = NULL,
size_title = NULL,
caption = NULL,
titles = snakecase::to_sentence_case,
theme = NULL
)

```

Arguments

data	A data frame or tibble.
x	Unquoted x aesthetic variable.
xend	Unquoted xend aesthetic variable.
y	Unquoted y aesthetic variable.
yend	Unquoted yend aesthetic variable.
col	Unquoted col and fill aesthetic variable.
facet	Unquoted facet aesthetic variable.
facet2	Unquoted second facet variable.
group	Unquoted group aesthetic variable.
text	Unquoted text aesthetic variable.
mapping	Map additional aesthetics using the <code>ggplot2::aes</code> function (e.g. <code>shape</code>). Excludes colour, fill or alpha.
stat	A <code>ggplot2</code> character string stat.
position	Position adjustment. Either a character string (e.g. <code>"identity"</code>), or a function (e.g. <code>ggplot2::position_identity()</code>).
coord	A coordinate function from <code>ggplot2</code> (e.g. <code>ggplot2::coord_cartesian(clip = "off")</code>).
pal	Colours to use. A character vector of hex codes (or names).
pal_na	Colour to use for NA values. A character vector of a hex code (or name).
alpha	Opacity. A number between 0 and 1.
...	Other arguments passed to the <code>ggplot2::geom_segment</code> function.
title	Title string.
subtitle	Subtitle string.
x_breaks	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
x_expand	Padding to the limits with the <code>ggplot2::expansion</code> function, or a vector of length 2 (e.g. <code>c(0, 0)</code>).
x_gridlines	TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.
x_include	For a continuous x variable, any values that the limits should encompass (e.g. 0).

<code>x_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
<code>x_limits</code>	A vector of length 2 to determine the limits of the axis.
<code>x_oob</code>	For a continuous x variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
<code>x_sec_axis</code>	A secondary axis using the <code>ggplot2::sec_axis</code> or <code>ggplot2::dup_axis</code> function.
<code>x_title</code>	Axis title string. Use "" for no title.
<code>x_trans</code>	For a numeric x variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
<code>y_breaks</code>	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
<code>y_expand</code>	Padding to the limits with the <code>ggplot2::expansion</code> function, or a vector of length 2 (e.g. <code>c(0, 0)</code>).
<code>y_gridlines</code>	TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.
<code>y_include</code>	For a continuous y variable, any values that the limits should encompass (e.g. 0).
<code>y_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
<code>y_limits</code>	A vector of length 2 to determine the limits of the axis.
<code>y_oob</code>	For a continuous y variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
<code>y_sec_axis</code>	A secondary axis using the <code>ggplot2::sec_axis</code> or <code>ggplot2::dup_axis</code> function.
<code>y_title</code>	Axis title string. Use "" for no title.
<code>y_trans</code>	For a numeric y variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
<code>col_breaks</code>	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
<code>col_continuous</code>	For a continuous col variable, the type of colouring. Either "gradient" or "steps". Defaults to "gradient".
<code>col_include</code>	For a continuous col variable, any values that the limits should encompass (e.g. 0).
<code>col_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
<code>col_legend_place</code>	The place for the legend. Either "bottom", "right", "top" or "left". Or just the first letter of each.
<code>col_legend_ncol</code>	The number of columns for the legend elements.
<code>col_legend_nrow</code>	The number of rows for the legend elements.
<code>col_legend_rev</code>	Reverse the elements of the legend. Defaults to FALSE.
<code>col_limits</code>	A vector to determine the limits of the colour scale.

col_oob	For a continuous col variable, a scales::oob_* function of how to handle values outside of limits (e.g. scales::oob_keep). Defaults to scales::oob_keep.
col_rescale	For a continuous col variable, a scales::rescale function.
col_title	Legend title string. Use "" for no title.
col_trans	For a numeric col variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
facet_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a named vector of labels (e.g. c("value" = "label", ...)).
facet_ncol	The number of columns of facets. Only applies to a facet layout of "wrap".
facet_nrow	The number of rows of facets. Only applies to a facet layout of "wrap".
facet_scales	Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
facet_space	Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".
facet_layout	Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or facet2) argument is provided, then defaults to "wrap". If NULL and both facet and facet2 arguments are provided, defaults to "grid".
facet_switch	Whether the facet layout is "grid", whether to switch the facet labels to the opposite side of the plot. Either "x", "y" or "both".
linetype_title	Legend title string. Use "" for no title.
shape_title	Legend title string. Use "" for no title.
size_title	Legend title string. Use "" for no title.
caption	Caption title string.
titles	A function to format unspecified titles. Defaults to snakecase::to_sentence_case.
theme	A ggplot2 theme.

Value

A ggplot object.

Examples

```
data.frame(x1 = 2.62, x2 = 3.57, y1 = 21.0, y2 = 15.0) |>
  gg_segment(
    x = x1,
    xend = x2,
    y = y1,
    yend = y2,
    pal = "#1B9E77"
  )
```

`gg_sf`*Sf ggplot*

Description

Create a blank ggplot with a wrapper around `ggplot2::geom_sf(stat = "sf", ...)`.

Usage

```
gg_sf(  
  data = NULL,  
  col = NULL,  
  facet = NULL,  
  facet2 = NULL,  
  group = NULL,  
  text = NULL,  
  mapping = NULL,  
  stat = "sf",  
  position = "identity",  
  coord = ggplot2::coord_sf(clip = "off"),  
  pal = NULL,  
  pal_na = pal_grey,  
  alpha = NULL,  
  ...,  
  title = NULL,  
  subtitle = NULL,  
  x_gridlines = FALSE,  
  x_title = NULL,  
  y_gridlines = FALSE,  
  y_title = NULL,  
  col_breaks = NULL,  
  col_continuous = "gradient",  
  col_include = NULL,  
  col_labels = NULL,  
  col_legend_place = NULL,  
  col_legend_ncol = NULL,  
  col_legend_nrow = NULL,  
  col_legend_rev = FALSE,  
  col_limits = NULL,  
  col_oob = scales::oob_keep,  
  col_rescale = scales::rescale(),  
  col_title = NULL,  
  col_trans = "identity",  
  facet_labels = NULL,  
  facet_ncol = NULL,  
  facet_nrow = NULL,  
  facet_scales = "fixed",
```

```

facet_space = "fixed",
facet_layout = NULL,
facet_switch = NULL,
linetype_title = NULL,
shape_title = NULL,
size_title = NULL,
caption = NULL,
titles = snakecase::to_sentence_case,
theme = NULL
)

```

Arguments

data	A data frame or tibble.
col	Unquoted col and fill aesthetic variable.
facet	Unquoted facet aesthetic variable.
facet2	Unquoted second facet variable.
group	Unquoted group aesthetic variable.
text	Unquoted text aesthetic variable.
mapping	Map additional aesthetics using the <code>ggplot2::aes</code> function (e.g. <code>shape</code>). Excludes colour, fill or alpha.
stat	A <code>ggplot2</code> character string stat.
position	Position adjustment. Either a character string (e.g. <code>"identity"</code>), or a function (e.g. <code>ggplot2::position_identity()</code>).
coord	A coordinate function from <code>ggplot2</code> (e.g. <code>ggplot2::coord_sf(clip = "off")</code>).
pal	Colours to use. A character vector of hex codes (or names).
pal_na	Colour to use for NA values. A character vector of a hex code (or name).
alpha	Opacity. A number between 0 and 1.
...	Other arguments passed to the <code>ggplot2::geom_sf</code> function.
title	Title string.
subtitle	Subtitle string.
x_gridlines	TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.
x_title	Axis title string. Use "" for no title.
y_gridlines	TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.
y_title	Axis title string. Use "" for no title.
col_breaks	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
col_continuous	For a continuous col variable, the type of colouring. Either <code>"gradient"</code> or <code>"steps"</code> . Defaults to <code>"gradient"</code> .
col_include	For a continuous col variable, any values that the limits should encompass (e.g. 0).

<code>col_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
<code>col_legend_place</code>	The place for the legend. Either "bottom", "right", "top" or "left". Or just the first letter of each.
<code>col_legend_ncol</code>	The number of columns for the legend elements.
<code>col_legend_nrow</code>	The number of rows for the legend elements.
<code>col_legend_rev</code>	Reverse the elements of the legend. Defaults to FALSE.
<code>col_limits</code>	A vector to determine the limits of the colour scale.
<code>col_oob</code>	For a continuous col variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
<code>col_rescale</code>	For a continuous col variable, a <code>scales::rescale</code> function.
<code>col_title</code>	Legend title string. Use "" for no title.
<code>col_trans</code>	For a numeric col variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
<code>facet_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a named vector of labels (e.g. <code>c("value" = "label", ...)</code>).
<code>facet_ncol</code>	The number of columns of facets. Only applies to a facet layout of "wrap".
<code>facet_nrow</code>	The number of rows of facets. Only applies to a facet layout of "wrap".
<code>facet_scales</code>	Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
<code>facet_space</code>	Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".
<code>facet_layout</code>	Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or facet2) argument is provided, then defaults to "wrap". If NULL and both facet and facet2 arguments are provided, defaults to "grid".
<code>facet_switch</code>	Whether the facet layout is "grid", whether to switch the facet labels to the opposite side of the plot. Either "x", "y" or "both".
<code>linetype_title</code>	Legend title string. Use "" for no title.
<code>shape_title</code>	Legend title string. Use "" for no title.
<code>size_title</code>	Legend title string. Use "" for no title.
<code>caption</code>	Caption title string.
<code>titles</code>	A function to format unspecified titles. Defaults to <code>snakecase::to_sentence_case</code> .
<code>theme</code>	A ggplot2 theme.

Value

A ggplot object.

Examples

```
if (requireNamespace("sf", quietly = TRUE)) {
  sf::st_read(system.file("shape/nc.shp", package = "sf")) %>%
  gg_sf(
    col = AREA,
    pal = viridis::cividis(9))
}
```

gg_smooth

Smooth ggplot

Description

Create a smooth ggplot with a wrapper around `ggplot2::geom_smooth(stat = "smooth", ...)`.

Usage

```
gg_smooth(
  data = NULL,
  x = NULL,
  y = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  text = NULL,
  mapping = NULL,
  stat = "smooth",
  position = "identity",
  coord = ggplot2::coord_cartesian(clip = "off"),
  pal = NULL,
  pal_na = pal_grey,
  alpha = 0.5,
  ...,
  title = NULL,
  subtitle = NULL,
  x_breaks = NULL,
  x_expand = NULL,
  x_gridlines = NULL,
  x_include = NULL,
  x_labels = NULL,
  x_limits = NULL,
  x_oob = scales::oob_keep,
  x_sec_axis = ggplot2::waiver(),
  x_title = NULL,
  x_trans = "identity",
```

```

y_breaks = NULL,
y_expand = NULL,
y_gridlines = NULL,
y_include = NULL,
y_labels = NULL,
y_limits = NULL,
y_oob = scales::oob_keep,
y_sec_axis = ggplot2::waiver(),
y_title = NULL,
y_trans = "identity",
col_breaks = NULL,
col_continuous = "gradient",
col_include = NULL,
col_labels = NULL,
col_legend_place = NULL,
col_legend_ncol = NULL,
col_legend_nrow = NULL,
col_legend_rev = FALSE,
col_limits = NULL,
col_oob = scales::oob_keep,
col_rescale = scales::rescale(),
col_title = NULL,
col_trans = "identity",
facet_labels = NULL,
facet_ncol = NULL,
facet_nrow = NULL,
facet_scales = "fixed",
facet_space = "fixed",
facet_layout = NULL,
facet_switch = NULL,
linetype_title = NULL,
shape_title = NULL,
size_title = NULL,
caption = NULL,
titles = snakecase::to_sentence_case,
theme = NULL
)

```

Arguments

<code>data</code>	A data frame or tibble.
<code>x</code>	Unquoted x aesthetic variable.
<code>y</code>	Unquoted y aesthetic variable.
<code>col</code>	Unquoted col and fill aesthetic variable.
<code>facet</code>	Unquoted facet aesthetic variable.
<code>facet2</code>	Unquoted second facet variable.
<code>group</code>	Unquoted group aesthetic variable.

text	Unquoted text aesthetic variable.
mapping	Map additional aesthetics using the <code>ggplot2::aes</code> function (e.g. <code>shape</code>). Excludes colour, fill or alpha.
stat	A <code>ggplot2</code> character string stat.
position	Position adjustment. Either a character string (e.g. <code>"identity"</code>), or a function (e.g. <code>ggplot2::position_identity()</code>).
coord	A coordinate function from <code>ggplot2</code> (e.g. <code>ggplot2::coord_cartesian(clip = "off")</code>).
pal	Colours to use. A character vector of hex codes (or names).
pal_na	Colour to use for NA values. A character vector of a hex code (or name).
alpha	Opacity. A number between 0 and 1.
...	Other arguments passed to the <code>ggplot2::geom_smooth</code> function.
title	Title string.
subtitle	Subtitle string.
x_breaks	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
x_expand	Padding to the limits with the <code>ggplot2::expansion</code> function, or a vector of length 2 (e.g. <code>c(0, 0)</code>).
x_gridlines	TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.
x_include	For a continuous x variable, any values that the limits should encompass (e.g. 0).
x_labels	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
x_limits	A vector of length 2 to determine the limits of the axis.
x_oob	For a continuous x variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
x_sec_axis	A secondary axis using the <code>ggplot2::sec_axis</code> or <code>ggplot2::dup_axis</code> function.
x_title	Axis title string. Use "" for no title.
x_trans	For a numeric x variable, a transformation object (e.g. <code>"log10"</code> , <code>"sqrt"</code> or <code>"reverse"</code>).
y_breaks	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
y_expand	Padding to the limits with the <code>ggplot2::expansion</code> function, or a vector of length 2 (e.g. <code>c(0, 0)</code>).
y_gridlines	TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.
y_include	For a continuous y variable, any values that the limits should encompass (e.g. 0).
y_labels	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
y_limits	A vector of length 2 to determine the limits of the axis.
y_oob	For a continuous y variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .

<code>y_sec_axis</code>	A secondary axis using the <code>ggplot2::sec_axis</code> or <code>ggplot2::dup_axis</code> function.
<code>y_title</code>	Axis title string. Use "" for no title.
<code>y_trans</code>	For a numeric y variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
<code>col_breaks</code>	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
<code>col_continuous</code>	For a continuous col variable, the type of colouring. Either "gradient" or "steps". Defaults to "gradient".
<code>col_include</code>	For a continuous col variable, any values that the limits should encompass (e.g. 0).
<code>col_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
<code>col_legend_place</code>	The place for the legend. Either "bottom", "right", "top" or "left". Or just the first letter of each.
<code>col_legend_ncol</code>	The number of columns for the legend elements.
<code>col_legend_nrow</code>	The number of rows for the legend elements.
<code>col_legend_rev</code>	Reverse the elements of the legend. Defaults to FALSE.
<code>col_limits</code>	A vector to determine the limits of the colour scale.
<code>col_oob</code>	For a continuous col variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
<code>col_rescale</code>	For a continuous col variable, a <code>scales::rescale</code> function.
<code>col_title</code>	Legend title string. Use "" for no title.
<code>col_trans</code>	For a numeric col variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
<code>facet_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a named vector of labels (e.g. <code>c("value" = "label", ...)</code>).
<code>facet_ncol</code>	The number of columns of facets. Only applies to a facet layout of "wrap".
<code>facet_nrow</code>	The number of rows of facets. Only applies to a facet layout of "wrap".
<code>facet_scales</code>	Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
<code>facet_space</code>	Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".
<code>facet_layout</code>	Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or <code>facet2</code>) argument is provided, then defaults to "wrap". If NULL and both <code>facet</code> and <code>facet2</code> arguments are provided, defaults to "grid".
<code>facet_switch</code>	Whether the facet layout is "grid", whether to switch the facet labels to the opposite side of the plot. Either "x", "y" or "both".
<code>linetype_title</code>	Legend title string. Use "" for no title.

shape_title	Legend title string. Use "" for no title.
size_title	Legend title string. Use "" for no title.
caption	Caption title string.
titles	A function to format unspecified titles. Defaults to snakecase::to_sentence_case.
theme	A ggplot2 theme.

Value

A ggplot object.

Examples

```
library(palmerpenguins)

penguins |>
  tidyr::drop_na(sex) |>
  gg_smooth(
    x = flipper_length_mm,
    y = body_mass_g,
    facet = species
  )
```

gg_step

Step ggplot

Description

Create a step plot with a wrapper around `ggplot2::geom_step(stat = "identity", ...)`.

Usage

```
gg_step(
  data = NULL,
  x = NULL,
  y = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  text = NULL,
  mapping = NULL,
  stat = "identity",
  position = "identity",
  coord = ggplot2::coord_cartesian(clip = "off"),
  pal = NULL,
  pal_na = pal_grey,
```

```
alpha = 1,  
...,  
title = NULL,  
subtitle = NULL,  
x_breaks = NULL,  
x_expand = NULL,  
x_gridlines = NULL,  
x_include = NULL,  
x_labels = NULL,  
x_limits = NULL,  
x_oob = scales::oob_keep,  
x_sec_axis = ggplot2::waiver(),  
x_title = NULL,  
x_trans = "identity",  
y_breaks = NULL,  
y_expand = NULL,  
y_gridlines = NULL,  
y_include = NULL,  
y_labels = NULL,  
y_limits = NULL,  
y_oob = scales::oob_keep,  
y_sec_axis = ggplot2::waiver(),  
y_title = NULL,  
y_trans = "identity",  
col_breaks = NULL,  
col_continuous = "gradient",  
col_include = NULL,  
col_labels = NULL,  
col_legend_place = NULL,  
col_legend_ncol = NULL,  
col_legend_nrow = NULL,  
col_legend_rev = FALSE,  
col_limits = NULL,  
col_oob = scales::oob_keep,  
col_rescale = scales::rescale(),  
col_title = NULL,  
col_trans = "identity",  
facet_labels = NULL,  
facet_ncol = NULL,  
facet_nrow = NULL,  
facet_scales = "fixed",  
facet_space = "fixed",  
facet_layout = NULL,  
facet_switch = NULL,  
linetype_title = NULL,  
shape_title = NULL,  
size_title = NULL,  
caption = NULL,
```

```

    titles = snakecase::to_sentence_case,
    theme = NULL
  )

```

Arguments

<code>data</code>	A data frame or tibble.
<code>x</code>	Unquoted x aesthetic variable.
<code>y</code>	Unquoted y aesthetic variable.
<code>col</code>	Unquoted col and fill aesthetic variable.
<code>facet</code>	Unquoted facet aesthetic variable.
<code>facet2</code>	Unquoted second facet variable for a facet grid of facet by facet2 variables.
<code>group</code>	Unquoted group aesthetic variable.
<code>text</code>	Unquoted text aesthetic variable.
<code>mapping</code>	Map additional aesthetics using the <code>ggplot2::aes</code> function (e.g. <code>shape</code>). Excludes colour, fill or alpha.
<code>stat</code>	A <code>ggplot2</code> character string stat.
<code>position</code>	Position adjustment. Either a character string (e.g. <code>"identity"</code>), or a function (e.g. <code>ggplot2::position_identity()</code>).
<code>coord</code>	A coordinate function from <code>ggplot2</code> (e.g. <code>ggplot2::coord_cartesian(clip = "off")</code>).
<code>pal</code>	Colours to use. A character vector of hex codes (or names).
<code>pal_na</code>	Colour to use for NA values. A character vector of a hex code (or name).
<code>alpha</code>	Opacity. A number between 0 and 1.
<code>...</code>	Other arguments passed to the <code>ggplot2::geom_step</code> function.
<code>title</code>	Title string.
<code>subtitle</code>	Subtitle string.
<code>x_breaks</code>	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
<code>x_expand</code>	Padding to the limits with the <code>ggplot2::expansion</code> function, or a vector of length 2 (e.g. <code>c(0, 0)</code>).
<code>x_gridlines</code>	TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.
<code>x_include</code>	For a continuous x variable, any values that the limits should encompass (e.g. 0).
<code>x_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
<code>x_limits</code>	A vector of length 2 to determine the limits of the axis.
<code>x_oob</code>	For a continuous x variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
<code>x_sec_axis</code>	A secondary axis using the <code>ggplot2::sec_axis</code> or <code>ggplot2::dup_axis</code> function.
<code>x_title</code>	Axis title string. Use <code>""</code> for no title.

<code>x_trans</code>	For a numeric x variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
<code>y_breaks</code>	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
<code>y_expand</code>	Padding to the limits with the <code>ggplot2::expansion</code> function, or a vector of length 2 (e.g. <code>c(0, 0)</code>).
<code>y_gridlines</code>	TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.
<code>y_include</code>	For a continuous y variable, any values that the limits should encompass (e.g. 0).
<code>y_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
<code>y_limits</code>	A vector of length 2 to determine the limits of the axis.
<code>y_oob</code>	For a continuous y variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
<code>y_sec_axis</code>	A secondary axis using the <code>ggplot2::sec_axis</code> or <code>ggplot2::dup_axis</code> function.
<code>y_title</code>	Axis title string. Use "" for no title.
<code>y_trans</code>	For a numeric y variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
<code>col_breaks</code>	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
<code>col_continuous</code>	For a continuous col variable, the type of colouring. Either "gradient" or "steps". Defaults to "gradient".
<code>col_include</code>	For a continuous col variable, any values that the limits should encompass (e.g. 0).
<code>col_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
<code>col_legend_place</code>	The place for the legend. Either "bottom", "right", "top" or "left". Or just the first letter of each.
<code>col_legend_ncol</code>	The number of columns for the legend elements.
<code>col_legend_nrow</code>	The number of rows for the legend elements.
<code>col_legend_rev</code>	Reverse the elements of the legend. Defaults to FALSE.
<code>col_limits</code>	A vector to determine the limits of the colour scale.
<code>col_oob</code>	For a continuous col variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
<code>col_rescale</code>	For a continuous col variable, a <code>scales::rescale</code> function.
<code>col_title</code>	Legend title string. Use "" for no title.
<code>col_trans</code>	For a numeric col variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
<code>facet_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a named vector of labels (e.g. <code>c("value" = "label", ...)</code>).

facet_ncol	The number of columns of facets. Only applies to a facet layout of "wrap".
facet_nrow	The number of rows of facets. Only applies to a facet layout of "wrap".
facet_scales	Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
facet_space	Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".
facet_layout	Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or facet2) argument is provided, then defaults to "wrap". If NULL and both facet and facet2 arguments are provided, defaults to "grid".
facet_switch	Whether the facet layout is "grid", whether to switch the facet labels to the opposite side of the plot. Either "x", "y" or "both".
linetype_title	Legend title string. Use "" for no title.
shape_title	Legend title string. Use "" for no title.
size_title	Legend title string. Use "" for no title.
caption	Caption title string.
titles	A function to format unspecified titles. Defaults to snakecase::to_sentence_case.
theme	A ggplot2 theme.

Value

A ggplot object.

Examples

```
ggplot2::economics |>
  gg_step(
    x = date,
    y = unemploy,
    y_title = "Unemployment",
    pal = "#1B9E77",
    x_limits = c(lubridate::ymd("2010-01-01"), lubridate::NA_Date_),
    y_include = 0,
    coord = ggplot2::coord_cartesian(clip = "on")
  )
```

 gg_text

Text ggplot

Description

Create a text plot with a wrapper around ggplot2::geom_text(stat = "identity", ...).

Usage

```
gg_text(  
  data = NULL,  
  x = NULL,  
  y = NULL,  
  col = NULL,  
  facet = NULL,  
  facet2 = NULL,  
  group = NULL,  
  label = NULL,  
  text = NULL,  
  mapping = NULL,  
  stat = "identity",  
  position = "identity",  
  coord = ggplot2::coord_cartesian(clip = "off"),  
  pal = NULL,  
  pal_na = pal_grey,  
  alpha = 1,  
  ...,  
  title = NULL,  
  subtitle = NULL,  
  x_breaks = NULL,  
  x_expand = NULL,  
  x_gridlines = NULL,  
  x_include = NULL,  
  x_labels = NULL,  
  x_limits = NULL,  
  x_oob = scales::oob_keep,  
  x_sec_axis = ggplot2::waiver(),  
  x_title = NULL,  
  x_trans = "identity",  
  y_breaks = NULL,  
  y_expand = NULL,  
  y_gridlines = NULL,  
  y_include = NULL,  
  y_labels = NULL,  
  y_limits = NULL,  
  y_oob = scales::oob_keep,  
  y_sec_axis = ggplot2::waiver(),  
  y_title = NULL,  
  y_trans = "identity",  
  col_breaks = NULL,  
  col_continuous = "gradient",  
  col_include = NULL,  
  col_labels = NULL,  
  col_legend_place = NULL,  
  col_legend_ncol = NULL,  
  col_legend_nrow = NULL,  
)
```



```

col_legend_rev = FALSE,
col_limits = NULL,
col_oob = scales::oob_keep,
col_rescale = scales::rescale(),
col_title = NULL,
col_trans = "identity",
facet_labels = NULL,
facet_ncol = NULL,
facet_nrow = NULL,
facet_scales = "fixed",
facet_space = "fixed",
facet_layout = NULL,
facet_switch = NULL,
linetype_title = NULL,
shape_title = NULL,
size_title = NULL,
caption = NULL,
titles = snakecase::to_sentence_case,
theme = NULL
)

```

Arguments

data	A data frame or tibble.
x	Unquoted x aesthetic variable.
y	Unquoted y aesthetic variable.
col	Unquoted col and fill aesthetic variable.
facet	Unquoted facet aesthetic variable.
facet2	Unquoted second facet variable for a facet grid of facet by facet2 variables.
group	Unquoted group aesthetic variable.
label	Unquoted label aesthetic variable.
text	Unquoted text aesthetic variable.
mapping	Map additional aesthetics using the <code>ggplot2::aes</code> function (e.g. <code>shape</code>). Excludes colour, fill or alpha.
stat	A <code>ggplot2</code> character string stat.
position	Position adjustment. Either a character string (e.g. <code>"identity"</code>), or a function (e.g. <code>ggplot2::position_identity()</code>).
coord	A coordinate function from <code>ggplot2</code> (e.g. <code>ggplot2::coord_cartesian(clip = "off")</code>).
pal	Colours to use. A character vector of hex codes (or names).
pal_na	Colour to use for NA values. A character vector of a hex code (or name).
alpha	Opacity. A number between 0 and 1.
...	Other arguments passed to the <code>ggplot2::geom_text</code> function.
title	Title string.

subtitle	Subtitle string.
x_breaks	A scales::breaks_* function (e.g. scales::breaks_pretty()), or a vector of breaks.
x_expand	Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
x_gridlines	TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.
x_include	For a continuous x variable, any values that the limits should encompass (e.g. 0).
x_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
x_limits	A vector of length 2 to determine the limits of the axis.
x_oob	For a continuous x variable, a scales::oob_* function of how to handle values outside of limits (e.g. scales::oob_keep). Defaults to scales::oob_keep.
x_sec_axis	A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
x_title	Axis title string. Use "" for no title.
x_trans	For a numeric x variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
y_breaks	A scales::breaks_* function (e.g. scales::breaks_pretty()), or a vector of breaks.
y_expand	Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
y_gridlines	TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.
y_include	For a continuous y variable, any values that the limits should encompass (e.g. 0).
y_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
y_limits	A vector of length 2 to determine the limits of the axis.
y_oob	For a continuous y variable, a scales::oob_* function of how to handle values outside of limits (e.g. scales::oob_keep). Defaults to scales::oob_keep.
y_sec_axis	A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
y_title	Axis title string. Use "" for no title.
y_trans	For a numeric y variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
col_breaks	A scales::breaks_* function (e.g. scales::breaks_pretty()), or a vector of breaks.
col_continuous	For a continuous col variable, the type of colouring. Either "gradient" or "steps". Defaults to "gradient".
col_include	For a continuous col variable, any values that the limits should encompass (e.g. 0).
col_labels	A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.

<code>col_legend_place</code>	The place for the legend. Either "bottom", "right", "top" or "left". Or just the first letter of each.
<code>col_legend_ncol</code>	The number of columns for the legend elements.
<code>col_legend_nrow</code>	The number of rows for the legend elements.
<code>col_legend_rev</code>	Reverse the elements of the legend. Defaults to FALSE.
<code>col_limits</code>	A vector to determine the limits of the colour scale.
<code>col_oob</code>	For a continuous col variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
<code>col_rescale</code>	For a continuous col variable, a <code>scales::rescale</code> function.
<code>col_title</code>	Legend title string. Use "" for no title.
<code>col_trans</code>	For a numeric col variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
<code>facet_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a named vector of labels (e.g. <code>c("value" = "label", ...)</code>).
<code>facet_ncol</code>	The number of columns of facets. Only applies to a facet layout of "wrap".
<code>facet_nrow</code>	The number of rows of facets. Only applies to a facet layout of "wrap".
<code>facet_scales</code>	Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
<code>facet_space</code>	Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".
<code>facet_layout</code>	Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or facet2) argument is provided, then defaults to "wrap". If NULL and both facet and facet2 arguments are provided, defaults to "grid".
<code>facet_switch</code>	Whether the facet layout is "grid", whether to switch the facet labels to the opposite side of the plot. Either "x", "y" or "both".
<code>linetype_title</code>	Legend title string. Use "" for no title.
<code>shape_title</code>	Legend title string. Use "" for no title.
<code>size_title</code>	Legend title string. Use "" for no title.
<code>caption</code>	Caption title string.
<code>titles</code>	A function to format unspecified titles. Defaults to <code>snakecase::to_sentence_case</code> .
<code>theme</code>	A <code>ggplot2</code> theme.

Value

A `ggplot` object.

Examples

```
library(dplyr)

bind_rows(
  mtcars |> slice_min(order_by = mpg),
  mtcars |> slice_max(order_by = mpg)
) |>
  tibble::rownames_to_column(var = "model") %>%
  gg_text(
    x = model,
    y = mpg,
    col = mpg,
    label = model,
    size = 3.53,
    y_include = c(min(.$mpg) * 0.95, max(.$mpg) * 1.05),
    pal = RColorBrewer::brewer.pal(9, "RdBu"),
    y_title = "Miles per gallon"
  )
```

gg_tile

Tile ggplot

Description

Create a tile plot with a wrapper around `ggplot2::geom_tile(stat = "identity", ...)`.

Usage

```
gg_tile(
  data = NULL,
  x = NULL,
  y = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  text = NULL,
  mapping = NULL,
  stat = "identity",
  position = "identity",
  coord = ggplot2::coord_cartesian(clip = "off"),
  pal = NULL,
  pal_na = pal_grey,
  alpha = 0.9,
  ...,
  title = NULL,
  subtitle = NULL,
```

```
x_breaks = NULL,  
x_expand = NULL,  
x_gridlines = NULL,  
x_include = NULL,  
x_labels = NULL,  
x_limits = NULL,  
x_oob = scales::oob_keep,  
x_sec_axis = ggplot2::waiver(),  
x_title = NULL,  
x_trans = "identity",  
y_breaks = NULL,  
y_expand = NULL,  
y_gridlines = NULL,  
y_include = NULL,  
y_labels = NULL,  
y_limits = NULL,  
y_oob = scales::oob_keep,  
y_sec_axis = ggplot2::waiver(),  
y_title = NULL,  
y_trans = "identity",  
col_breaks = NULL,  
col_continuous = "gradient",  
col_include = NULL,  
col_labels = NULL,  
col_legend_place = NULL,  
col_legend_ncol = NULL,  
col_legend_nrow = NULL,  
col_legend_rev = FALSE,  
col_limits = NULL,  
col_oob = scales::oob_keep,  
col_rescale = scales::rescale(),  
col_title = NULL,  
col_trans = "identity",  
facet_labels = NULL,  
facet_ncol = NULL,  
facet_nrow = NULL,  
facet_scales = "fixed",  
facet_space = "fixed",  
facet_layout = NULL,  
facet_switch = NULL,  
linetype_title = NULL,  
shape_title = NULL,  
size_title = NULL,  
caption = NULL,  
titles = snakecase::to_sentence_case,  
theme = NULL  
)
```

Arguments

<code>data</code>	A data frame or tibble.
<code>x</code>	Unquoted x aesthetic variable.
<code>y</code>	Unquoted y aesthetic variable.
<code>col</code>	Unquoted col and fill aesthetic variable.
<code>facet</code>	Unquoted facet aesthetic variable.
<code>facet2</code>	Unquoted second facet variable for a facet grid of facet by facet2 variables.
<code>group</code>	Unquoted group aesthetic variable.
<code>text</code>	Unquoted text aesthetic variable.
<code>mapping</code>	Map additional aesthetics using the <code>ggplot2::aes</code> function (e.g. <code>shape</code>). Excludes colour, fill or alpha.
<code>stat</code>	A <code>ggplot2</code> character string stat.
<code>position</code>	Position adjustment. Either a character string (e.g. <code>"identity"</code>), or a function (e.g. <code>ggplot2::position_identity()</code>).
<code>coord</code>	A coordinate function from <code>ggplot2</code> (e.g. <code>ggplot2::coord_cartesian(clip = "off")</code>).
<code>pal</code>	Colours to use. A character vector of hex codes (or names).
<code>pal_na</code>	Colour to use for NA values. A character vector of a hex code (or name).
<code>alpha</code>	Opacity. A number between 0 and 1.
<code>...</code>	Other arguments passed to the <code>ggplot2::geom_tile</code> function.
<code>title</code>	Title string.
<code>subtitle</code>	Subtitle string.
<code>x_breaks</code>	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
<code>x_expand</code>	Padding to the limits with the <code>ggplot2::expansion</code> function, or a vector of length 2 (e.g. <code>c(0, 0)</code>).
<code>x_gridlines</code>	TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.
<code>x_include</code>	For a continuous x variable, any values that the limits should encompass (e.g. 0).
<code>x_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
<code>x_limits</code>	A vector of length 2 to determine the limits of the axis.
<code>x_oob</code>	For a continuous x variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
<code>x_sec_axis</code>	A secondary axis using the <code>ggplot2::sec_axis</code> or <code>ggplot2::dup_axis</code> function.
<code>x_title</code>	Axis title string. Use "" for no title.
<code>x_trans</code>	For a numeric x variable, a transformation object (e.g. <code>"log10"</code> , <code>"sqrt"</code> or <code>"reverse"</code>).
<code>y_breaks</code>	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.

y_expand	Padding to the limits with the <code>ggplot2::expansion</code> function, or a vector of length 2 (e.g. <code>c(0, 0)</code>).
y_gridlines	TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.
y_include	For a continuous y variable, any values that the limits should encompass (e.g. 0).
y_labels	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
y_limits	A vector of length 2 to determine the limits of the axis.
y_oob	For a continuous y variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
y_sec_axis	A secondary axis using the <code>ggplot2::sec_axis</code> or <code>ggplot2::dup_axis</code> function.
y_title	Axis title string. Use "" for no title.
y_trans	For a numeric y variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
col_breaks	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
col_continuous	For a continuous col variable, the type of colouring. Either "gradient" or "steps". Defaults to "gradient".
col_include	For a continuous col variable, any values that the limits should encompass (e.g. 0).
col_labels	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
col_legend_place	The place for the legend. Either "bottom", "right", "top" or "left". Or just the first letter of each.
col_legend_ncol	The number of columns for the legend elements.
col_legend_nrow	The number of rows for the legend elements.
col_legend_rev	Reverse the elements of the legend. Defaults to FALSE.
col_limits	A vector to determine the limits of the colour scale.
col_oob	For a continuous col variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
col_rescale	For a continuous col variable, a <code>scales::rescale</code> function.
col_title	Legend title string. Use "" for no title.
col_trans	For a numeric col variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
facet_labels	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a named vector of labels (e.g. <code>c("value" = "label", ...)</code>).
facet_ncol	The number of columns of facets. Only applies to a facet layout of "wrap".
facet_nrow	The number of rows of facets. Only applies to a facet layout of "wrap".

facet_scales	Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
facet_space	Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".
facet_layout	Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or facet2) argument is provided, then defaults to "wrap". If NULL and both facet and facet2 arguments are provided, defaults to "grid".
facet_switch	Whether the facet layout is "grid", whether to switch the facet labels to the opposite side of the plot. Either "x", "y" or "both".
linetype_title	Legend title string. Use "" for no title.
shape_title	Legend title string. Use "" for no title.
size_title	Legend title string. Use "" for no title.
caption	Caption title string.
titles	A function to format unspecified titles. Defaults to snakecase::to_sentence_case.
theme	A ggplot2 theme.

Value

A ggplot object.

Examples

```
library(ggplot2)

df <- data.frame(
  x = rep(c(2, 5, 7, 9, 12), 2),
  y = rep(c(1, 2), each = 5),
  z = factor(rep(1:5, each = 2)),
  w = rep(diff(c(0, 4, 6, 8, 10, 14)), 2)
)

df %>%
  gg_tile(x = x, y = y, col = z,
          height = 0.9, width = 0.9)
```

gg_violin

Violin ggplot

Description

Create a violin plot with a wrapper around ggplot2::geom_violin(stat = "ydensity", ...).

Usage

```
gg_violin(  
  data = NULL,  
  x = NULL,  
  y = NULL,  
  col = NULL,  
  facet = NULL,  
  facet2 = NULL,  
  group = NULL,  
  text = NULL,  
  mapping = NULL,  
  stat = "ydensity",  
  position = "dodge",  
  coord = ggplot2::coord_cartesian(clip = "off"),  
  pal = NULL,  
  pal_na = pal_grey,  
  alpha = 0.9,  
  ...,  
  title = NULL,  
  subtitle = NULL,  
  x_breaks = NULL,  
  x_expand = NULL,  
  x_gridlines = NULL,  
  x_include = NULL,  
  x_labels = NULL,  
  x_limits = NULL,  
  x_oob = scales::oob_keep,  
  x_sec_axis = ggplot2::waiver(),  
  x_title = NULL,  
  x_trans = "identity",  
  y_breaks = NULL,  
  y_expand = NULL,  
  y_gridlines = NULL,  
  y_include = NULL,  
  y_labels = NULL,  
  y_limits = NULL,  
  y_oob = scales::oob_keep,  
  y_sec_axis = ggplot2::waiver(),  
  y_title = NULL,  
  y_trans = "identity",  
  col_breaks = NULL,  
  col_continuous = "gradient",  
  col_include = NULL,  
  col_labels = NULL,  
  col_legend_place = NULL,  
  col_legend_ncol = NULL,  
  col_legend_nrow = NULL,  
  col_legend_rev = FALSE,
```

```

col_limits = NULL,
col_oob = scales::oob_keep,
col_rescale = scales::rescale(),
col_title = NULL,
col_trans = "identity",
facet_labels = NULL,
facet_ncol = NULL,
facet_nrow = NULL,
facet_scales = "fixed",
facet_space = "fixed",
facet_layout = NULL,
facet_switch = NULL,
linetype_title = NULL,
shape_title = NULL,
size_title = NULL,
caption = NULL,
titles = snakecase::to_sentence_case,
theme = NULL
)

```

Arguments

<code>data</code>	A data frame or tibble.
<code>x</code>	Unquoted x aesthetic variable.
<code>y</code>	Unquoted y aesthetic variable.
<code>col</code>	Unquoted col and fill aesthetic variable.
<code>facet</code>	Unquoted facet aesthetic variable.
<code>facet2</code>	Unquoted second facet variable for a facet grid of facet by facet2 variables.
<code>group</code>	Unquoted group aesthetic variable.
<code>text</code>	Unquoted text aesthetic variable.
<code>mapping</code>	Map additional aesthetics using the <code>ggplot2::aes</code> function (e.g. <code>shape</code>). Excludes colour, fill or alpha.
<code>stat</code>	A <code>ggplot2</code> character string stat.
<code>position</code>	Position adjustment. Either a character string (e.g. <code>"identity"</code>), or a function (e.g. <code>ggplot2::position_identity()</code>).
<code>coord</code>	A coordinate function from <code>ggplot2</code> (e.g. <code>ggplot2::coord_cartesian(clip = "off")</code>).
<code>pal</code>	Colours to use. A character vector of hex codes (or names).
<code>pal_na</code>	Colour to use for NA values. A character vector of a hex code (or name).
<code>alpha</code>	Opacity. A number between 0 and 1.
<code>...</code>	Other arguments passed to the <code>ggplot2::geom_violin</code> function.
<code>title</code>	Title string.
<code>subtitle</code>	Subtitle string.
<code>x_breaks</code>	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.

x_expand	Padding to the limits with the <code>ggplot2::expansion</code> function, or a vector of length 2 (e.g. <code>c(0, 0)</code>).
x_gridlines	TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.
x_include	For a continuous x variable, any values that the limits should encompass (e.g. 0).
x_labels	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
x_limits	A vector of length 2 to determine the limits of the axis.
x_oob	For a continuous x variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
x_sec_axis	A secondary axis using the <code>ggplot2::sec_axis</code> or <code>ggplot2::dup_axis</code> function.
x_title	Axis title string. Use "" for no title.
x_trans	For a numeric x variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
y_breaks	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
y_expand	Padding to the limits with the <code>ggplot2::expansion</code> function, or a vector of length 2 (e.g. <code>c(0, 0)</code>).
y_gridlines	TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.
y_include	For a continuous y variable, any values that the limits should encompass (e.g. 0).
y_labels	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
y_limits	A vector of length 2 to determine the limits of the axis.
y_oob	For a continuous y variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
y_sec_axis	A secondary axis using the <code>ggplot2::sec_axis</code> or <code>ggplot2::dup_axis</code> function.
y_title	Axis title string. Use "" for no title.
y_trans	For a numeric y variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
col_breaks	A <code>scales::breaks_*</code> function (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.
col_continuous	For a continuous col variable, the type of colouring. Either "gradient" or "steps". Defaults to "gradient".
col_include	For a continuous col variable, any values that the limits should encompass (e.g. 0).
col_labels	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.
col_legend_place	The place for the legend. Either "bottom", "right", "top" or "left". Or just the first letter of each.

<code>col_legend_ncol</code>	The number of columns for the legend elements.
<code>col_legend_nrow</code>	The number of rows for the legend elements.
<code>col_legend_rev</code>	Reverse the elements of the legend. Defaults to FALSE.
<code>col_limits</code>	A vector to determine the limits of the colour scale.
<code>col_oob</code>	For a continuous col variable, a <code>scales::oob_*</code> function of how to handle values outside of limits (e.g. <code>scales::oob_keep</code>). Defaults to <code>scales::oob_keep</code> .
<code>col_rescale</code>	For a continuous col variable, a <code>scales::rescale</code> function.
<code>col_title</code>	Legend title string. Use "" for no title.
<code>col_trans</code>	For a numeric col variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
<code>facet_labels</code>	A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a named vector of labels (e.g. <code>c("value" = "label", ...)</code>).
<code>facet_ncol</code>	The number of columns of facets. Only applies to a facet layout of "wrap".
<code>facet_nrow</code>	The number of rows of facets. Only applies to a facet layout of "wrap".
<code>facet_scales</code>	Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
<code>facet_space</code>	Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".
<code>facet_layout</code>	Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or <code>facet2</code>) argument is provided, then defaults to "wrap". If NULL and both <code>facet</code> and <code>facet2</code> arguments are provided, defaults to "grid".
<code>facet_switch</code>	Whether the facet layout is "grid", whether to switch the facet labels to the opposite side of the plot. Either "x", "y" or "both".
<code>linetype_title</code>	Legend title string. Use "" for no title.
<code>shape_title</code>	Legend title string. Use "" for no title.
<code>size_title</code>	Legend title string. Use "" for no title.
<code>caption</code>	Caption title string.
<code>titles</code>	A function to format unspecified titles. Defaults to <code>snakecase::to_sentence_case</code> .
<code>theme</code>	A <code>ggplot2</code> theme.

Value

A `ggplot` object.

Examples

```
library(dplyr)
library(palmerpenguins)

penguins |>
  tidyr::drop_na(sex) |>
  gg_violin(
    x = sex,
    y = flipper_length_mm,
    col = sex,
    facet = species,
    col_labels = stringr::str_to_sentence
  )
```

light_mode

Light theme for a ggplot

Description

Light theme for a ggplot visualisation.

Usage

```
light_mode(
  base_size = 10,
  base_family = "",
  base_face = "plain",
  base_pal = "#121b24",
  title_family = NULL,
  title_face = "bold",
  title_pal = NULL,
  title_size = ggplot2::rel(1.1),
  title_vjust = 0,
  title_margin = ggplot2::margin(t = base_size * -0.75, b = base_size * 2),
  subtitle_family = NULL,
  subtitle_face = NULL,
  subtitle_pal = NULL,
  subtitle_size = NULL,
  subtitle_vjust = 1,
  subtitle_margin = ggplot2::margin(t = base_size * -1, b = base_size + 10),
  caption_family = NULL,
  caption_face = NULL,
  caption_alpha = 0.33,
  caption_pal = base_pal,
  caption_size = ggplot2::rel(0.9),
  caption_hjust = 0,
  caption_vjust = 1,
  caption_margin = ggplot2::margin(t = base_size)
)
```

Arguments

<code>base_size</code>	The base size of the text. Defaults to 10.
<code>base_family</code>	The base family of the text. Defaults to "".
<code>base_face</code>	The base face of the text. Defaults to "plain".
<code>base_pal</code>	The base colour of the text. Defaults to "#121b24".
<code>title_family</code>	The font family of the title. Defaults to the <code>base_family</code> .
<code>title_face</code>	The font face of the title. Defaults to "bold".
<code>title_pal</code>	The colour of the title. Defaults to the <code>base_pal</code> first element.
<code>title_size</code>	The size of the title. Defaults to the <code>base_size</code> * 1.1.
<code>title_vjust</code>	The vertical adjustment of the title. Defaults to 0.
<code>title_margin</code>	The margin of the title. A <code>ggplot2::margin</code> function.
<code>subtitle_family</code>	The font family of the subtitle. Defaults to the <code>base_family</code> .
<code>subtitle_face</code>	The font face of the subtitle. Defaults to the <code>base_face</code> .
<code>subtitle_pal</code>	The colour of the subtitle. Defaults to the <code>base_pal</code> first element.
<code>subtitle_size</code>	The size of the subtitle. Defaults to the <code>base_size</code> .
<code>subtitle_vjust</code>	The vertical adjustment of the subtitle. Defaults to 1.
<code>subtitle_margin</code>	The margin of the subtitle. A <code>ggplot2::margin</code> function.
<code>caption_family</code>	The font family of the caption. Defaults to the <code>base_family</code> .
<code>caption_face</code>	The font face of the caption. Defaults to the <code>base_face</code> .
<code>caption_alpha</code>	The alpha of the caption pal. Defaults to 0.33. Use 1 for no alpha.
<code>caption_pal</code>	The colour of the caption (before <code>caption_alpha</code> is applied). Defaults to the <code>base_pal</code> first element.
<code>caption_size</code>	The size of the caption. Defaults to the <code>base_size</code> * 0.9.
<code>caption_hjust</code>	The horizontal adjustment of the caption. Defaults to 0.
<code>caption_vjust</code>	The vertical adjustment of the caption. Defaults to 1.
<code>caption_margin</code>	The margin of the caption. A <code>ggplot2::margin</code> function.

Value

A `ggplot` theme.

Examples

```
library(palmerpenguins)
library(ggplot2)

#set for a plot
penguins |>
  gg_point(
    x = flipper_length_mm,
```

```
    y = body_mass_g,  
    col = species,  
    theme = light_mode()  
  )  
  
#set globally  
## Not run:  
  theme_set(light_mode())  
  
penguins |>  
  gg_point(  
    x = flipper_length_mm,  
    y = body_mass_g,  
    col = species  
  )  
  
## End(Not run)
```

pal_blue

Default blue colour

Description

A default blue colour used to colour when there is no col variable.

Usage

```
pal_blue
```

Format

An object of class character of length 1.

Value

A character vector.

Examples

```
scales::show_col(pal_blue)
```

pal_dark_mode	<i>Default colours used in the dark_mode theme.</i>
---------------	---

Description

Default colours used in the dark_mode theme for the (1) base text and axis, (2) plot background, (3) panel background and (4) gridlines.

Usage

```
pal_dark_mode
```

Format

An object of class character of length 4.

Value

A character vector.

Examples

```
scales::show_col(pal_dark_mode)
```

pal_discrete	<i>Default colour blind safe categorical palette with 5 colours</i>
--------------	---

Description

The default colour blind safe 5 colour palette used to colour a categorical col variable.

Usage

```
pal_discrete
```

Format

An object of class character of length 5.

Value

A character vector of hex codes.

References

Derived from a Datawrapper blog dated 30/03/2022 by Lisa Charlotte Muth.

Examples

```
scales::show_col(pal_discrete)

ggplot2::diamonds |>
  gg_bar(x = color,
        col = color,
        pal = pal_discrete,
        width = 0.75)

ggplot2::diamonds |>
  gg_blank(x = color,
          col = color,
          stat = "count",
          pal = pal_discrete) +
  ggplot2::geom_point(stat = "count")

ggplot2::diamonds |>
  gg_blank(x = color,
          col = color,
          stat = "count",
          pal = pal_discrete,
          theme = dark_mode()) +
  ggplot2::geom_point(stat = "count")
```

pal_discrete2

A colour blind safe categorical palette with 6 colours

Description

A colour blind safe 6 colour palette used to colour a categorical col variable that works only on a light background.

Usage

```
pal_discrete2
```

Format

An object of class character of length 6.

Value

A character vector of hex codes.

References

Derived from a Datawrapper blog dated 30/03/2022 by Lisa Charlotte Muth.

Examples

```
scales::show_col(pal_discrete2)

ggplot2::diamonds |>
  gg_bar(x = color,
         col = color,
         pal = pal_discrete2,
         width = 0.75)

ggplot2::diamonds |>
  gg_blank(x = color,
          col = color,
          stat = "count",
          pal = pal_discrete2) +
  ggplot2::geom_point(stat = "count")
```

pal_grey

Default grey colour

Description

The default grey colour used to colour NA values.

Usage

```
pal_grey
```

Format

An object of class character of length 1.

Value

A character vector.

Examples

```
scales::show_col(pal_grey)
```

pal_light_mode	<i>Default colours used in the light_mode theme.</i>
----------------	--

Description

Default colours used in the light_mode theme for the (1) base text and axis, (2) plot background, (3) panel background and (4) gridlines.

Usage

```
pal_light_mode
```

Format

An object of class character of length 4.

Value

A character vector.

Examples

```
scales::show_col(pal_light_mode)
```

str_keep_seq	<i>Keep elements in a vector sequence, and replace the rest with ""</i>
--------------	---

Description

Keep elements in a vector sequence, and replace the rest with ""

Usage

```
str_keep_seq(x, by = 2, offset = 0, ...)
```

Arguments

x	A vector.
by	The increment of elements to keep. Defaults to 2.
offset	An offset to start at the intended offset. Defaults to 0. Possible values are -1 to (by - 2)
...	If numeric, other arguments passed to the scales::comma function.

Value

A vector.

Examples

```
x <- LETTERS[1:12]
str_keep_seq(x)
str_keep_seq(x, offset = -1)
str_keep_seq(x, by = 3)
str_keep_seq(x, by = 3, offset = -1)
str_keep_seq(x, by = 3, offset = 1)

y <- c(1000, 2000, 3000)
str_keep_seq(y)
str_keep_seq(y, big.mark = " ")

z <- c(0.0, 0.25, 0.5, 0.75, 1)
str_keep_seq(z)
str_keep_seq(z, drop0trailing = TRUE)

library(palmerpenguins)
penguins |>
  gg_jitter(x = species,
            y = body_mass_g,
            col = flipper_length_mm,
            facet = island,
            facet2 = species,
            y_breaks = scales::breaks_pretty(n = 10),
            y_labels = \(x) str_keep_seq(x, by = 2),
            x_labels = \(x) str_keep_seq(x, by = 2),
            col_labels = \(x) str_keep_seq(x, by = 2, offset = -1))
```

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