

Package: utilitybeltgg (via r-universe)

August 31, 2024

Title What the Package Does (One Line, Title Case)

Version 0.0.0.9000

Description What the package does (one paragraph).

License MIT + file LICENSE

Encoding UTF-8

LazyData true

Roxygen list(markdown = TRUE)

RoxygenNote 7.2.0

Imports assertthat,forcats, ggplot2, ggpibr, ggthemes, magrittr,
rlang, scales

Suggests lifecycle, testthat (>= 3.0.0)

Config/testthat/edition 3

Repository <https://selkamand.r-universe.dev>

RemoteUrl <https://github.com/selkamand/utilitybeltgg>

RemoteRef HEAD

RemoteSha 94bdae63af4ff3b6162e001f609d0c5c2ad78ca1

Contents

geom_barplot_counts	2
geom_crossbar_predefined	3
ggbbarplot	4
ggdensity	5
scale_show_infinities_x	6
scale_show_infinities_y	7
theme_axis_titles_cleveland	9
theme_common_adjustments	9
theme_fivethirtyeight_two	10
theme_legend_bottom	11
theme_legend_left	11
theme_legend_none	12

theme_legend_right	12
theme_legend_title_none	13
theme_legend_top	13
theme_minimal_bordered	14
theme_no_legend	14
theme_no_legend_title	15
Index	16

geom_barplot_counts *geom barplot counts*

Description

Add text labels indicating counts above barplot columns. Works on plots that have a `geom_bar()` layer. Works even if you flip axis with `coord_flip()`.

Usage

```
geom_barplot_counts(
  distance_from_bar = 1.5,
  orientation = "h",
  size = 4,
  fontface = "bold",
  alpha = 0.8,
  color = "black",
  family = "Helvetica"
)
```

Arguments

<code>distance_from_bar</code>	distance between text and cbar
<code>orientation</code>	orientation of barplot ("h" / "horizontal" / "v" / "vertical")
<code>size</code>	size of text (number)
<code>fontface</code>	Font face ("plain", "italic", "bold", "bold.italic") (string)
<code>alpha</code>	transparancy (number)
<code>color</code>	colour (string)
<code>family</code>	font family (string)

Value

`ggplot geom`

Examples

```
mtcars %>%
  ggplot2::ggplot(ggplot2::aes(x=as.character(cyl))) +
  ggplot2::geom_bar() +
  ggplot2::xlab("cylinders") +
  geom_barplot_counts()
```

geom_crossbar_predefined

Add crossbar to ggplot

Description

Adds a crossbar to a ggplot. Best used when comparing one categorical and one numeric variable using geom_point / geom_jitter(height=0).

Usage

```
geom_crossbar_predefined(
  summaryfunction = stats::median,
  width = 0.4,
  size = 0.3,
  colour
)
```

Arguments

summaryfunction	a function run on the y aesthetic to determine where line is drawn. Options include median, mean, max, min, or any other function that summarises a numeric vector into a single number (function)
width	width of crossbar
size, colour	ggplot aesthetics

Value

ggplot geom

Examples

```
mtcars %>%
  ggplot2::ggplot(ggplot2::aes(cyl>6, mpg)) +
  ggplot2::geom_point() +
  geom_crossbar_predefined()
```

ggbbarplot*Plot*

Description

Plot

Usage

```
ggbbarplot(  
  data,  
  col,  
  orientation = "h",  
  fill = NULL,  
  title = NULL,  
  position = "stack",  
  ...  
)
```

Arguments

data	a dataset to plot (dataframe)
col	column of dataframe to plot (don't quote)
orientation	orientation of barplot ("h" / "horizontal" / "v" / "vertical")
fill	column of dataframe to color based on (don't quote)
title	title of graph (string)
position	see ?ggplot2::geom_bar for details (Usually one of: "stack", "dodge", "fill")
...	set any other barplot property. See ?ggplot2::geom_bar for details. (e.g. alpha = 0.4)

Value

ggplot

Examples

```
ggbbarplot(iris, Species, fill = Species, orientation = "horizontal", title = "My Freq Graph")
```

`ggdensity`*Density Plot*

Description

Density Plot

Usage

```
ggdensity(  
  data,  
  col,  
  fill = "steelblue",  
  alpha = 0.5,  
  summary_stats = FALSE,  
  text_xpos = NULL,  
  text_ypos = 0.04,  
  text_sigfigs = Inf,  
  ...  
)
```

Arguments

data	datafrmae
col	column (don't quote)
fill	geom_density fill color
alpha	geom_density alpha color
summary_stats	add text with summary stats to plot (boolean)
text_xpos	x position of summary stat text (numeric)
text_ypos	y position of summary stat text (numeric)
text_sigfigs	number of significant figures to write summary statistic to (numeric)
...	other geom_density aesthetics (e.g. linetype = "dashed")

Value

ggplot

Examples

```
ggdensity(mtcars, mpg, summary = TRUE)
```

scale_show_infinities_x
Include Infinite Values in Plot

Description

Will replace infinite values by the nearest limit.

Usage

```
scale_show_infinities_x(
  trans = "identity",
  limits = NULL,
  position = "bottom",
  breaks = ggplot2::waiver(),
  ...
)
```

Arguments

trans	For continuous scales, the name of a transformation object or the object itself. Built-in transformations include "asn", "atanh", "boxcox", "date", "exp", "hms", "identity", "log", "log10", "log1p", "log2", "logit", "modulus", "probability", "probit", "pseudo_log", "reciprocal", "reverse", "sqrt" and "time". A transformation object bundles together a transform, its inverse, and methods for generating breaks and labels. Transformation objects are defined in the scales package, and are called <name>_trans (e.g., scales::boxcox_trans()). You can create your own transformation with scales::trans_new() .
limits	One of: <ul style="list-style-type: none"> • NULL to use the default scale range • A numeric vector of length two providing limits of the scale. Use NA to refer to the existing minimum or maximum • A function that accepts the existing (automatic) limits and returns new limits. Also accepts rlang <code>lambda</code> function notation. Note that setting limits on positional scales will remove data outside of the limits. If the purpose is to zoom, use the limit argument in the coordinate system (see coord_cartesian()).
position	For position scales, The position of the axis. left or right for y axes, top or bottom for x axes.
breaks	One of: <ul style="list-style-type: none"> • NULL for no breaks • waiver() for the default breaks computed by the transformation object • A numeric vector of positions

- A function that takes the limits as input and returns breaks as output (e.g., a function returned by `scales::extended_breaks()`). Also accepts rlang `lambda` function notation.

... Other arguments to `ggplot2::scale_x_continuous` or `ggplot2::scale_y_continuous`

Details

This function also allows you to pass arguments along to `ggplot2::scale_x_continuous()` since once you add this call you won't be able to edit the continuous scale elsewhere. Oftentimes you'll want to use the `trans` argument to, for example, visualize your data on a log scale.

Value

`ScaleContinuousPosition` object that can be added to a `ggplot` object using `+`

See Also

`scale_show_infinities_y()`
`ggplot2::scale_x_continuous()`

Examples

```
## Not run:
data = mtcars
  dplyr::mutate(qsec2 = ifelse(qsec > 19, Inf, qsec))

# Plot with infinities set to nearest limit
data %>%
  ggplot2::ggplot(ggplot2::aes(x=qsec2, y=carb)) +
  ggplot2::geom_point() +
  scale_show_infinities_x()

# Plot on a log10 scale with infinities set to nearest limit
data %>%
  ggplot2::ggplot(ggplot2::aes(x=qsec2, y=carb)) +
  ggplot2::geom_point() +
  scale_show_infinities_x(trans="log10")

## End(Not run)
```

`scale_show_infinities_y`

Include Infinite Values in Plot

Description

Will replace infinite values by the nearest limit.

Usage

```
scale_show_infinities_y(
  trans = "identity",
  limits = NULL,
  position = "bottom",
  breaks = ggplot2::waiver(),
  ...
)
```

Arguments

<code>trans</code>	For continuous scales, the name of a transformation object or the object itself. Built-in transformations include "asn", "atanh", "boxcox", "date", "exp", "hms", "identity", "log", "log10", "log1p", "log2", "logit", "modulus", "probability", "probit", "pseudo_log", "reciprocal", "reverse", "sqrt" and "time". A transformation object bundles together a transform, its inverse, and methods for generating breaks and labels. Transformation objects are defined in the <code>scales</code> package, and are called <code><name>_trans</code> (e.g., <code>scales::boxcox_trans()</code>). You can create your own transformation with <code>scales::trans_new()</code> .
<code>limits</code>	One of: <ul style="list-style-type: none"> • <code>NULL</code> to use the default scale range • A numeric vector of length two providing limits of the scale. Use <code>NA</code> to refer to the existing minimum or maximum • A function that accepts the existing (automatic) limits and returns new limits. Also accepts rlang <code>lambda</code> function notation. Note that setting limits on positional scales will remove data outside of the limits. If the purpose is to zoom, use the <code>limit</code> argument in the coordinate system (see <code>coord_cartesian()</code>).
<code>position</code>	For position scales, The position of the axis. <code>left</code> or <code>right</code> for y axes, <code>top</code> or <code>bottom</code> for x axes.
<code>breaks</code>	One of: <ul style="list-style-type: none"> • <code>NULL</code> for no breaks • <code>waiver()</code> for the default breaks computed by the <code>transformation object</code> • A numeric vector of positions • A function that takes the limits as input and returns breaks as output (e.g., a function returned by <code>scales::extended_breaks()</code>). Also accepts rlang <code>lambda</code> function notation.
<code>...</code>	Arguments passed on to <code>scale_show_infinities_x</code>

Value

ScaleContinuousPosition object that can be added to a ggplot object using `+`

See Also

`scale_show_infinities_x()`

Examples

```
## Not run:  
data = mtcars %>%  
  dplyr::mutate(qsec2 = ifelse(qsec > 19, Inf, qsec))  
  
# Plot with infinites set to nearest limit  
data %>%  
  ggplot2::ggplot(ggplot2::aes(x=carb, y=qsec2)) +  
  ggplot2::geom_point() +  
  scale_show_infinities_y()  
  
# Plot on a log10 scale with infinites set to nearest limit  
data %>%  
  ggplot2::ggplot(ggplot2::aes(x=carb, y=qsec2)) +  
  ggplot2::geom_point() +  
  scale_show_infinities_y(trans="log10")  
  
## End(Not run)
```

theme_axis_titles_cleveland
Custom Themes

Description

Custom Themes

Usage

```
theme_axis_titles_cleveland()
```

Value

ggtheme

theme_common_adjustments
Custom Themes

Description

ggplot theme that fixes a bunch of issues I tend to have with plots.

Usage

```
theme_common_adjustments(
  dist_from_plot_xlab = 10,
  dist_from_plot_ylab = 10,
  dist_from_plot_ggtitle = 10,
  no_background = FALSE,
  subtitle_face = "plain"
)
```

Arguments

<code>dist_from_plot_xlab</code>	distance between x axis title and plot (number)
<code>dist_from_plot_ylab</code>	distance between y axis title and plot (number)
<code>dist_from_plot_ggtitle</code>	distance between y axis title and plot (number)
<code>no_background</code>	set all backgrounds to clear? (flag)
<code>subtitle_face</code>	Font face ("plain", "italic", "bold", "bold.italic")

Details

By default, will bold center axis and plot titles and tweak distance of axis_titles to plot

Value

ggtheme

Examples

```
mtcars %>%
  ggplot2::ggplot(ggplot2::aes(cyl>6, mpg)) +
  ggplot2::geom_point() +
  theme_common_adjustments()
```

theme_fivethirtyeight_two

Custom Themes

Description

Custom Themes

Usage

```
theme_fivethirtyeight_two()
```

Value

```
ggtheme
```

theme_legend_bottom *Custom Themes*

Description

Custom Themes

Usage

```
theme_legend_bottom(direction = "horizontal")
```

Arguments

direction "Vertical or Horizontal"

Value

```
ggtheme
```

theme_legend_left *Custom Themes*

Description

Custom Themes

Usage

```
theme_legend_left(direction = "vertical")
```

Arguments

direction "Vertical or Horizontal"

Value

```
ggtheme
```

theme_legend_none *Custom Themes*

Description

Custom Themes

Usage

```
theme_legend_none()
```

Value

ggtheme

theme_legend_right *Custom Themes*

Description

Custom Themes

Usage

```
theme_legend_right(direction = "vertical")
```

Arguments

direction "Vertical or Horizontal"

Value

ggtheme

`theme_legend_title_none`

Custom Themes

Description

Custom Themes

Usage

```
theme_legend_title_none()
```

Value

ggtheme

`theme_legend_top`

Custom Themes

Description

Custom Themes

Usage

```
theme_legend_top(direction = "horizontal")
```

Arguments

`direction` "Vertical or Horizontal"

Value

ggtheme

`theme_minimal_bordered`

Mimimal theme with border

Description

A minimal theme with a border. Works well for faceted graphs

Usage

```
theme_minimal_bordered(border_color = "grey40", border_thickness = NULL, ...)
```

Arguments

<code>border_color</code>	Colour of border
<code>border_thickness</code>	border thickness in mm
<code>...</code>	Arguments passed on to <code>ggplot2::theme_minimal</code>
<code>base_size</code>	base font size, given in pts.
<code>base_family</code>	base font family
<code>base_line_size</code>	base size for line elements
<code>base_rect_size</code>	base size for rect elements

Examples

```
mtcars %>%
  ggplot2::ggplot(ggplot2::aes(x = mpg, y=disp)) +
  ggplot2::geom_point() +
  theme_minimal_bordered()
```

`theme_no_legend`

Remove theme legend

Description

[Deprecated]

Usage

```
theme_no_legend(...)
```

Arguments

<code>...</code>	no arguments are used. Included only so code written for older versions of package doesn't break
------------------	--------------------------------------------------------------------------------------------------

Value

theme

theme_no_legend_title *Remove theme legend*

Description

[Deprecated]

Usage

`theme_no_legend_title(...)`

Arguments

... no arguments are used. Included only so code written for older versions of package doesn't break

Value

theme

Index

coord_cartesian(), 6, 8
geom_barplot_counts, 2
geom_crossbar_predefined, 3
ggbarplot, 4
ggdensity, 5
ggplot2::scale_x_continuous(), 7
ggplot2::theme_minimal, 14

lambda, 6–8

scale_show_infinities_x, 6, 8
scale_show_infinities_x(), 8
scale_show_infinities_y, 7
scale_show_infinities_y(), 7
scales::boxcox_trans(), 6, 8
scales::extended_breaks(), 7, 8
scales::trans_new(), 6, 8

theme_axis_titles_cleveland, 9
theme_common_adjustments, 9
theme_fivethirtyeight_two, 10
theme_legend_bottom, 11
theme_legend_left, 11
theme_legend_none, 12
theme_legend_right, 12
theme_legend_title_none, 13
theme_legend_top, 13
theme_minimal_bordered, 14
theme_no_legend, 14
theme_no_legend_title, 15
transformation object, 6, 8