Package ‘stevethemes’

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Type Package
Title Steve's 'ggplot2' Themes and Related Theme Elements
Depends R (>= 3.5.0)
Version 0.1.0
Maintainer Steve Miller <steven.v.miller@gmail.com>
Description This is a compilation of my preferred themes and related theme elements for 'ggplot2'. I believe these themes and theme elements are aesthetically pleasing, both for pedagogical instruction and for the presentation of applied statistical research to a wide audience. These themes imply routine use of easily obtained/free fonts, simple forms of which are included in this package.

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BugReports https://github.com/svmiller/stevethemes/issues
License MIT + file LICENSE
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Author Steve Miller [aut, cre] (<https://orcid.org/0000-0003-4072-6263>), Accademia di Belle Arti di Urbino [ctb] (Principal design of Titillium Web font), Steve Matteson [ctb] (Designer of Open Sans), Erik Spiekermann [ctb] (Designer of Fira Sans), Ralph du Carrois [ctb] (Designer of Fira Sans), Sebastian Kosch [ctb] (Design initiator for Crimson Pro), Jacques Le Bailly [ctb] (Designer of Crimson Pro)
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Adj Font Size

Description

These are assorted functions that will fine-tune various things in a ggplot2 plot.

Usage

adj_font_size(x, ...)

Arguments

x a numeric vector that will adjust the size of all fonts on the plot. Can take decimals and negative numbers.

... optional, called for side effects

Details

adj_font_size() is a simple wrapper for some basic ggplot2 code that will allow you to adjust the font size on the plot by some number.

Right now, adj_font_size() assumes you are using theme_steve() because the font sizes initialized in the function are defaults from the theme.

Value

adj_font_size() takes a plot made in ggplot2 and changes the font size by some number requested by the user. It returns a plot with bigger or smaller fonts, per the user’s request.

Author(s)

Steven V. Miller
example_plot

Examples

```r
library(ggplot2)

example_plot(type = "scatter") + adj_font_size(-2)
example_plot(type = "scatter") + adj_font_size(2)
```

example_plot     Create an example plot (in ggplot2) for experimenting with different styles

Description

element_plot() allows you to experiment with some ggplot2 themes, like those in this package, by seeing them applied to some example plots.

Usage

```r
element_plot(type = "bar")
```

Arguments

- `type` a type

Details

I'll add more here in a little bit.

Value

example_plot() returns a plot made in ggplot2, allowing the user to experiment with different themes to see which ones they like the best.

Author(s)

Steven V. Miller

Examples

```r
library(ggplot2)

element_plot()

element_plot()

element_plot(type = "faceted_line")

element_plot(type = "scatter")
```
**g_c**  
*Get a Custom Color from steve_hex*

**Description**

`g_c()` (i.e. *g*et *c*olor) is a simple function that interfaces with the steve_hex data frame to return a hex value associated with a named color.

**Usage**

```
g_c(x)
```

**Arguments**

- `x`: a label coinciding with a value in the `color` column of the steve_hex data frame

**Details**

Check steve_hex in this same package for the custom colors included

**Value**

`g_c()` returns a character vector, in particular, a hex triplet that coincides with the label supplied in the function. Use it for specifying a custom fill or color in a plot.

**Author(s)**

Steven V. Miller

**Examples**

```
g_c("su_blue")
g_c("martel_pink")
```

---

**kwh_gdp**  
*Kilowatt Hours per Capita and GDP per Capita, 2010*

**Description**

This is a simple data frame of the GDP per capita and kilowatt hours consumed per capita of over 130 sovereign states in 2010.

**Usage**

```
kwh_gdp
```
### martel_ratings

**Format**

A data frame the following 7 variables.

- **country**: the name of the country
- **iso3c**: the three-character ISO code of the country
- **year**: the year of observation (2010)
- **kwhpc**: the electric power consumption (kilowatt hours) per capita of the country
- **gdppc**: the GDP per capita of the country in current USD
- **ln_kwhpc**: the (log-transformed) electric power consumption (kilowatt hours) per capita of the country
- **ln_gdppc**: the (log-transformed) GDP per capita of the country in current USD

**Details**

Data come from a use of the `WDI()` function in the `WDI` package. The GDP per capita data come from a combination of the World Bank and OECD. The energy consumption data come from the International Energy Agency. Data exist to be used in a simple scatterplot.

### martel_ratings

<table>
<thead>
<tr>
<th>martel_ratings</th>
<th>CAGEMATCH Ratings of Rick Martel</th>
</tr>
</thead>
</table>

**Description**

This is a simple data frame of ratings (on a 1-10 scale) of Rick Martel.

**Usage**

`martel_ratings`

**Format**

A data frame the following 2 variables.

- **date**: a date vector for when the rating was posted on CAGEMATCH
- **value**: an individual person’s rating of Rick Martel (on a 1-10 scale)

**Details**

Data exist to be used an example bar chart. CAGEMATCH (stylized in all caps) is an internet wrestling database, for which these ratings are fan submissions. Rick Martel is an objective 10/10.
Miscellaneous functions to make your \texttt{ggplot2} plot "print-ready"

Description

These are assorted functions that will make your plot "print-ready" by removing gridlines and giving hard-line axes to the plot. These are typically changes requested by publishers for the printing process.

Usage

\begin{verbatim}
no_gridlines(...) 
make_classic(...) 
\end{verbatim}

Arguments

\begin{verbatim}
... 
\end{verbatim}

optional, called for side effects

Details

\texttt{no_gridlines()} is a simple wrapper for some basic \texttt{ggplot2} code that will allow you to remove gridlines from the plot. \texttt{make_classic()} removes gridlines, removes the default gray background, *and* imposes a black, solid line on both axes. It will also hard code the axis text to be black. Using the latter with the former is likely redundant.

You will want to put these functions after a theme you’ve declared. If you run this before adding a theme over it, the theme you add will probably overwrite this function.

Value

\texttt{no_gridlines()} takes a plot made in \texttt{ggplot2} and removes the gridlines from the plot before returning it to the user. \texttt{make_classic()} takes a plot made in \texttt{ggplot2} and removes the gridlines, gray background, and adds solid axes to the plot.

Author(s)

Steven V. Miller

Examples

\begin{verbatim}
library(ggplot2) 
example_plot(type = "scatter") 
example_plot(type='scatter') + no_gridlines() 
example_plot(type='scatter') + make_classic() 
\end{verbatim}
se_counties_gdppc

GDP per Capita of Swedish Counties, 2001-2020

Description

This is a simple data frame of the GDP per capita of Swedish counties from 2001 to 2020.

Usage

se_counties_gdppc

Format

A data frame the following 4 variables.

- nuts: the Nomenclature of Territorial Units for Statistics (NUTS) code for the county
- county: the name of the county
- year: the year of observation
- value: the GDP per capita of the county in nominal SEK

Details

Data come from the OECD and exist to be used as a faceted line chart.

steve_hex

Some Hex Triplets I Find Useful/Interesting/Fun

Description

This is a simple data frame with labels corresponding to hex triplets (i.e. web colors) that I find useful, interesting, or fun.

Usage

steve_hex

Format

A data frame the following 2 variables.

- color: a character vector describing the color in question
- hex: a hex triplet (with preceding hashtag) of the color

Details

Data exist to be used by g_c() in this same package.
theme_steve

Description

theme_steve() is my default theme framework for graphs I make with ggplot2. It starts theme_bw(), which is available in ggplot2, but adjusts the margins and axes a bit to my liking. The end result is, I think, a lovely template for graphs I make in R.

Usage

theme_steve(style = "web", font, ...)

Arguments

style                   various styles/adjustments to make to the base theme. Must be one of the following: "web" (default), "ms", "fira", "custom", or "generic". The "custom" style is a fancy way of saying "supply your own fonts". Where "custom" is used in this argument, something must be supplied to the font argument in this same function.
font                    a character vector corresponding with a font that the user ideally has installed on their operating system.
...                     optional, called for side effects

Details

The best use of this function may involve the fonts you have installed on your system. The user should experiment with various options to see what they like. The "generic" style will use default ggplot2 fonts.

Value

No return value. Function is used for its side effect, which is to format a plot made in the ggplot2 package.

Examples

library(ggplot2)

# Experiment with options, those this depends on fonts you have installed.
eample_plot() + theme_steve(style='generic')
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