Package ‘ggdark’

October 13, 2022

Type Package
Title Dark Mode for 'ggplot2' Themes
Version 0.2.1
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Description Activate dark mode on your favorite 'ggplot2' theme
   with dark_mode() or use the dark versions of
   'ggplot2' themes, including dark_theme_gray(),
   dark_theme_minimal(), and others. When a dark theme
   is applied, all geom color and geom fill defaults
   are changed to make them visible against a dark
   background. To restore the defaults to their original
   values, use invert_geom_defaults().
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Depends R (>= 3.1)
Imports ggplot2 (>= 3.0)
Suggests testthat
Encoding UTF-8
LazyData true
RoxygenNote 6.1.0
NeedsCompilation no
Repository CRAN
Date/Publication 2019-01-11 17:30:06 UTC

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dark_mode

Activate dark mode on a 'ggplot2' theme

dark_mode(.theme = theme_get(), verbose = TRUE,
force_geom_invert = FALSE)

Arguments

.theme ggplot2 theme object
verbose print messages (default: TRUE)
force_geom_invert Force the inversion of geom defaults for fill and color/colour (default: FALSE)

Value
dark version of theme

Examples

library(ggplot2)

p1 <- ggplot(iris, aes(Sepal.Width, Sepal.Length, color = Species)) +
  geom_point()

p1 # theme returned by theme_get()
p1 + dark_mode() # activate dark mode on theme returned by theme_get()

p2 <- ggplot(iris, aes(Sepal.Width, Sepal.Length)) +
  geom_point() +
  facet_wrap(~ Species)

p2 + dark_mode(theme_minimal()) # activate dark mode on another theme

invert_geom_defaults() # restore geom defaults to their original values
Description

Use `dark_mode()` on your favorite 'ggplot2' theme to activate its dark mode. 'ggdark' also provides dark versions of the themes included in 'ggplot2': `dark_theme_grey()`, `dark_theme_bw()`, `dark_theme_minimal()`, and others. When a dark theme is applied, all geom color and geom fill defaults are inverted to make them visible against a dark background. To change them back, use `invert_geom_defaults()`.

**Usage**

```r
dark_theme_bw(base_size = 11, base_family = "", base_line_size = base_size/22, base_rect_size = base_size/22)
dark_theme_classic(base_size = 11, base_family = "", base_line_size = base_size/22, base_rect_size = base_size/22)
dark_theme_gray(base_size = 11, base_family = "", base_line_size = base_size/22, base_rect_size = base_size/22)
dark_theme_grey(base_size = 11, base_family = "", base_line_size = base_size/22, base_rect_size = base_size/22)
dark_theme_minimal(base_size = 11, base_family = "", base_line_size = base_size/22, base_rect_size = base_size/22)
dark_theme_light(base_size = 11, base_family = "", base_line_size = base_size/22, base_rect_size = base_size/22)
dark_theme_dark(base_size = 11, base_family = "", base_line_size = base_size/22, base_rect_size = base_size/22)
dark_theme_void(base_size = 11, base_family = "", base_line_size = base_size/22, base_rect_size = base_size/22)
```
dark_theme_test(base_size = 11, base_family = "", base_line_size = base_size/22, base_rect_size = base_size/22)

dark_theme_linedraw(base_size = 11, base_family = "", base_line_size = base_size/22, base_rect_size = base_size/22)

Arguments
base_size base font size
base_family base font family
base_line_size base size for line elements
base_rect_size base size for rect elements

Details
'dark_theme_gray' Dark version of theme_gray(), the signature 'ggplot2' theme with a grey background and white gridlines, designed to put the data forward yet make comparisons easy.
'dark_theme_bw' Dark version of theme_bw(), the classic dark-on-light 'ggplot2' theme. May work better for presentations displayed with a projector.
'dark_theme_linedraw' Dark version of theme_linedraw(), a theme with only black lines of various widths on white backgrounds, reminiscent of a line drawings. Serves a purpose similar to theme_bw(). Note that this theme has some very thin lines (< 1 pt) which some journals may refuse.
'dark_theme_light' Dark version of theme_light(), a theme similar to theme_linedraw() but with light grey lines and axes, to direct more attention towards the data.
'dark_theme_dark' Dark version of theme_dark(), the dark cousin of theme_light(), with similar line sizes but a dark background. Useful to make thin coloured lines pop out.
'dark_theme_minimal' Dark version of theme_minimal(), a minimalistic theme with no background annotations.
'dark_theme_classic' Dark version of theme_classic(), a classic-looking theme, with x and y axis lines and no gridlines.
'dark_theme_void' Dark version of theme_void(), a completely empty theme.
'dark_theme_test' Dark version of theme_test(), a theme for visual unit tests. It should ideally never change except for new features.

Examples
library(ggplot2)

mtcars2 <- within(mtcars, {
vs <- factor(vs, labels = c("V-shaped", "Straight"))
am <- factor(am, labels = c("Automatic", "Manual"))
cyl <- factor(cyl)
gear <- factor(gear)
})

p1 <- ggplot(mtcars2) +
invert_color

Description

Invert a vector of colors, provided the colors are valid hex codes or have valid names (i.e., they belong to base::colors()), and return a vector of inverted colors in hex code.

Usage

invert_color(color, colour = color)

invert_colour(color, colour = color)

Arguments

color color(s) to invert
colour alias of color
**Value**

Inverted color(s) in hex code

**Examples**

```r
invert_color("white") # "black"
invert_color("gray20") # "gray80"
invert_color("grey80") # "grey20"
invert_color(c("#000000", "#333333")) # "#FFFFFF","#CCDDCC"
```

**invert_geom_defaults**  
Invert geom defaults for fill and color/colour

**Description**

Invert geom defaults for fill and color/colour

**Usage**

```r
invert_geom_defaults(geoms = get_geoms())
```

**Arguments**

- `geoms`  
  List of geoms as ggproto objects

**Examples**

```r
library(ggplot2)

p <- ggplot(iris, aes(Sepal.Width, Sepal.Length)) +  
geom_point() +  
  facet_wrap(~ Species)

p + dark_theme_gray() # geom defaults changed
p + theme_gray()  # oh no! geoms are not visible on light background
invert_geom_defaults() # geom defaults changed back
p + theme_gray() # back to normal
```
invert_theme_elements

Description
Invert theme elements

Usage
invert_theme_elements(.theme)

Arguments
.theme theme to invert

Value
Inverted theme
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