Package 'ggdark'

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Type Package

Title Dark Mode for 'ggplot2' Themes

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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

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NeedsCompilation no

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R topics documented:

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dark_mode *Activate dark mode on a 'ggplot2' theme*

Description

Activate dark mode on a 'ggplot2' theme

Usage

```
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
```

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ggdark   *'ggdark': Dark mode for 'ggplot2'*

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().

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ggdarktheme   *Complete dark themes*

Description

These are dark versions of complete themes from 'ggplot2' which control all non-data display. Use theme() if you just need to tweak the display of an existing theme.

Usage

```
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 verion 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) +
```

```
      geom_point(aes(x = wt, y = mpg, colour = gear)) +
      labs(title = "Fuel economy declines as weight increases",
           subtitle = "(1973-74)",
           caption = "Data from the 1974 Motor Trend US magazine.",
           tag = "Figure 1",
           x = "Weight (1000 lbs)",
           y = "Fuel economy (mpg)",
           colour = "Gears")

  p1 + dark_theme_gray()
  p1 + dark_theme_bw()
  p1 + dark_theme_linedraw()
  p1 + dark_theme_light()  # quite dark
  p1 + dark_theme_dark()   # quite light
  p1 + dark_theme_minimal()
  p1 + dark_theme_classic()
  p1 + dark_theme_void()

  # Theme examples with panels

  p2 <- p1 + facet_grid(vs ~ am)

  p2 + dark_theme_gray()
  p2 + dark_theme_bw()
  p2 + dark_theme_linedraw()
  p2 + dark_theme_light()  # quite dark
  p2 + dark_theme_dark()   # quite light
  p2 + dark_theme_minimal()
  p2 + dark_theme_classic()
  p2 + dark_theme_void()
```

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invert_color	*Invert color(s)*

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

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

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

Description

Invert geom defaults for fill and color/colour

Usage

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

Arguments

geoms   List of geoms as ggproto objects

Examples

```
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   *Invert theme elements*

Description

Invert theme elements

Usage

```
invert_theme_elements(.theme)
```

Arguments

.theme   theme to invert

Value

Inverted theme

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