

Package ‘colorhex’

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Type Package

Title Colors and Palettes from Color-Hex

Version 0.1.4

Description The website <<https://www.color-hex.com>> is a great resource of hex colour codes and palettes. This package allows you to retrieve palettes and colour information from the website directly from R. There are also custom scale-functions for 'ggplot2'.

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Encoding UTF-8

Imports cli, curl, ggplot2, graphics, grDevices, httr2, rvest

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URL <https://github.com/drmowinckels/colorhex>

BugReports <https://github.com/drmowinckels/colorhex/issues>

Suggests spelling, scales

Language en-US

NeedsCompilation no

Author Athanasia Mo Mowinckel [aut, cre]
(<<https://orcid.org/0000-0002-5756-0223>>),
Julia Romanowska [ctb] (<<https://orcid.org/0000-0001-6733-1953>>)

Maintainer Athanasia Mo Mowinckel <a.m.mowinckel@psykologi.uio.no>

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R topics documented:

get_color	2
get_latest_palettes	2
get_palette	3
get_popular_colors	3
get_popular_palettes	4

get_random_color	4
is_hex	5
scale-colorhex	5
scale-palettehex	7

Index	9
--------------	----------

get_color	<i>Get color information</i>
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Description

Get color information from www.color-hex.com of a hex-color.

Usage

```
get_color(hex)
```

Arguments

hex character string that is a hexadecimal color

Value

list of class 'colorhex'

Examples

```
if(curl::has_internet()){
  get_color("#470f0f")
}
```

get_latest_palettes	<i>Get latest palettes</i>
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Description

Retrieve the most recently made palettes from www.color-hex.com

Usage

```
get_latest_palettes()
```

Value

data.frame with name, id and colours

Examples

```
if(curl::has_internet()){
  get_latest_palettes()
}
```

get_palette	<i>Get palettes from id</i>
-------------	-----------------------------

Description

Get palette information from www.color-hex.com based on the palette id (can be found in the url)

Usage

```
get_palette(id)
```

Arguments

id numeric id of a palette

Value

data.frame with palette information

Examples

```
if(curl::has_internet()){
  get_palette(103107)

  # Lookup multiple palettes
  id <- c(103161, 103107)
  get_palette(id)
}
```

get_popular_colors	<i>Get popular colour</i>
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Description

www.color-hex.com has a list of colours that have been liked by the most users. This function will retrieve all of these.

Usage

```
get_popular_colors()
```

Value

character vector of hex colours

Examples

```
if(curl::has_internet()){  
  get_popular_colors()  
}
```

get_popular_palettes *Get most popular palettes*

Description

Retrieve the palettes most users have checked as favorites from www.color-hex.com

Usage

```
get_popular_palettes()
```

Value

data.frame with name, id and colours

Examples

```
if(curl::has_internet()){  
  get_popular_palettes()  
}
```

get_random_color *Generate random HEX colour*

Description

Generate random HEX colour

Usage

```
get_random_color()
```

Value

character hex value

Examples

```
get_random_color()
```

is_hex	<i>Validate Hex</i>
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Description

validate if string is hexadecimal color code

Usage

```
is_hex(x)
```

Arguments

x hexadecimal character

Value

logical. TRUE if object is a hexadecimal code

scale_colorhex	<i>Colour scales for ggplot2</i>
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Description

Colour and fill scales for ggplot2 plots, using object of class colorhex as basis for colour choices.

Usage

```
scale_colour_colorhex_d(x, type = "triadic", reverse = FALSE, ...)
```

```
scale_color_colorhex_d(x, type = "triadic", reverse = FALSE, ...)
```

```
scale_fill_colorhex_d(x, type = "triadic", reverse = FALSE, ...)
```

```
scale_colour_colorhex_c(x, type = "complementary", reverse = FALSE, ...)
```

```
scale_color_colorhex_c(x, type = "complementary", reverse = FALSE, ...)
```

```
scale_fill_colorhex_c(x, type = "complementary", reverse = FALSE, ...)
```

Arguments

x object of class colorhex

type character. Type of colours to use. One of c("complementary", "triadic" (default), "shades", "tints", "related")

reverse logical. If scale should be reversed (default: FALSE)

... arguments to be passed to [discrete_scale](#)

Details

The `colorhex` class is a list where there is a variety of extra information on the hex colour selected. This information can be used to create colour scales to be used in `ggplot2`.

Value

a `ggplot2`-proto

Functions

- `scale_colour_colorhex_d()`: Discrete colour scale
- `scale_color_colorhex_d()`: Discrete colour scale
- `scale_fill_colorhex_d()`: Discrete fill scale
- `scale_colour_colorhex_c()`: Continuous colour scale
- `scale_color_colorhex_c()`: Continuous colour scale
- `scale_fill_colorhex_c()`: Continuous fill scale

Examples

```
if(curl::has_internet()){
  library(ggplot2)

  x <- get_color("#008080")

  ggplot(mtcars, aes(mpg)) +
    geom_density(aes(fill = disp, group = disp)) +
    scale_fill_colorhex_c(x)

  ggplot(mtcars, aes(mpg)) +
    geom_density(aes(fill = disp, group = disp)) +
    scale_fill_colorhex_c(x, "tints")

  ggplot(mtcars, aes(mpg)) +
    geom_density(aes(fill = disp, group = disp)) +
    scale_fill_colorhex_c(x, "shades")

  ggplot(mtcars, aes(mpg, disp, colour = factor(cyl))) +
    geom_point() +
    scale_color_colorhex_d(x, "triadic")

  ggplot(mtcars, aes(mpg, disp, colour = factor(cyl))) +
    geom_point() +
    scale_color_colorhex_d(x, "shades")
}
```

scale-palettes *Colour scales for ggplot2*

Description

Colour and fill scales for ggplot2 plots, using object of class palette.

Usage

```
scale_colour_palette_d(x, which = 1, reverse = FALSE, ...)
```

```
scale_color_palette_d(x, which = 1, reverse = FALSE, ...)
```

```
scale_fill_palette_d(x, which = 1, reverse = FALSE, ...)
```

```
scale_colour_palette_c(x, which = 1, reverse = FALSE, ...)
```

```
scale_color_palette_c(x, which = 1, reverse = FALSE, ...)
```

```
scale_fill_palette_c(x, which = 1, reverse = FALSE, ...)
```

Arguments

x	object of class palette
which	selection of which palette of a set to choose. Either by name, id or numeric index.
reverse	logical. If scale should be reversed (default: FALSE)
...	arguments to be passed to discrete_scale

Details

The palette class is a data.frame of many palettes. This function takes such a data.frame and a choice of palette by name, id or numeric index can be made for the scale.

Value

ggplot2-proto

Functions

- `scale_colour_palette_d()`: Discrete colour scale
- `scale_color_palette_d()`: Discrete colour scale
- `scale_fill_palette_d()`: Discrete fill scale
- `scale_colour_palette_c()`: Continuous colour scale
- `scale_color_palette_c()`: Continuous colour scale
- `scale_fill_palette_c()`: Continuous fill scale

Examples

```
if(curl::has_internet()){
  library(ggplot2)

  x <- get_popular_palettes()

  ggplot(mtcars, aes(mpg)) +
    geom_density(aes(fill = disp, group = disp)) +
    scale_fill_palettehex_c(x)

  ggplot(mtcars, aes(mpg)) +
    geom_density(aes(fill = disp, group = disp)) +
    scale_fill_palettehex_c(x, 3)

  ggplot(mtcars, aes(mpg, disp, colour = factor(cyl))) +
    geom_point() +
    scale_color_palettehex_d(x)

  ggplot(mtcars, aes(mpg, disp, colour = factor(cyl))) +
    geom_point() +
    scale_color_palettehex_d(x, 1872)
}
```


Index

discrete_scale, 5, 7

get_color, 2

get_latest_palettes, 2

get_palette, 3

get_popular_colors, 3

get_popular_palettes, 4

get_random_color, 4

is_hex, 5

scale-colorhex, 5

scale-palettehex, 7

scale_color_colorhex_c
(scale-colorhex), 5

scale_color_colorhex_d
(scale-colorhex), 5

scale_color_palettehex_c
(scale-palettehex), 7

scale_color_palettehex_d
(scale-palettehex), 7

scale_colour_colorhex_c
(scale-colorhex), 5

scale_colour_colorhex_d
(scale-colorhex), 5

scale_colour_palettehex_c
(scale-palettehex), 7

scale_colour_palettehex_d
(scale-palettehex), 7

scale_fill_colorhex_c (scale-colorhex),
5

scale_fill_colorhex_d (scale-colorhex),
5

scale_fill_palettehex_c
(scale-palettehex), 7

scale_fill_palettehex_d
(scale-palettehex), 7