

Package: palette (via r-universe)

June 13, 2024

Title Color Scheme Helpers

Version 0.0.3

Description Hexadecimal codes are typically used to represent colors in R. Connecting these codes to their colors requires practice or memorization. 'palette' provides a 'vctrs' class for working with color palettes, including printing and plotting functions. The goal of the class is to place visual representations of color palettes directly on or, at least, next to their corresponding character representations. Palette extensions also are provided for data frames using 'pillar'.

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Encoding UTF-8

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RoxygenNote 7.3.1

URL <https://github.com/christopherkenny/palette>,
<https://christophertkenny.com/palette/>

BugReports <https://github.com/christopherkenny/palette/issues>

Imports cli, pillar, vctrs

Suggests ggplot2, spelling, testthat (>= 3.0.0), vdiffr

Config/testthat/edition 3

Language en-US

Depends R (>= 3.5)

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

RemoteUrl <https://github.com/christopherkenny/palette>

RemoteRef HEAD

RemoteSha 1fe787490f9680ebd84fea27b341262aa756d989

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brightness	<i>Control palette brightness</i>
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Description

Generic function to control the brightness of a palette.

Usage

```
darken(x, amount = 0.1, ...)
```

```
lighten(x, amount = 0.1, ...)
```

```
## Default S3 method:
darken(x, amount = 0.1, ...)
```

```
## S3 method for class 'palette'
darken(x, amount = 0.1, ...)
```

```
## Default S3 method:
lighten(x, amount = 0.1, ...)
```

```
## S3 method for class 'palette'
lighten(x, amount = 0.1, ...)
```

Arguments

x	A vector of colors
amount	A numeric value to control the brightness of the palette
...	Additional arguments passed to other methods. Currently ignored.

Value

A palette vector with the brightness adjusted

Examples

```
darken(palette(roygbiv))
lighten(palette(roygbiv))
```

palette	<i>Create a palette</i>
---------	-------------------------

Description

A palette is a class for color palettes built on `vctrs`. It is represented as a character vector of hexadecimal color codes. Named colors (like 'red') are translated to hexadecimal color codes.

Usage

```
palette(x = character())
validate_palette(x)
is_palette(x)
as_palette(x)
```

Arguments

x A character vector of colors

Value

a palette vector

Examples

```
palette(roygbiv)
```

palette_browse	<i>Browse a palette on colors.co</i>
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Description

Browse a palette on colors.co

Usage

```
palette_browse(x)
palette_browse_url(x)
```

Arguments

x A palette

Value

A URL to the palette

Examples

```
palette_browse(roygbiv)
```

palette_decode_url *Convert a URL to a palette*

Description

This function takes a URL from either <colors.co> or <colorhunt.co> and returns the palette.

Usage

```
palette_decode_url(x)
```

Arguments

x A URL from either 'colors.co' or 'colorhunt.co'

Value

a vector of type palette

Examples

```
palette_decode_url('https://colors.co/ff4444-ffae4d-ffff60-50ff50-3939fa')  
palette_decode_url('https://www.colorhunt.co/palette/b5c0d0ccd3caf5e8ddeed3d9')
```

palette_function	<i>Build a palette function</i>
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Description

Creates a palette function for use within `ggplot2` as an argument to `discrete_scale`. If the number of colors requested is greater than the length of the palette, the palette will be repeated. If the number of colors requested is less than the length of the palette, the palette will be truncated. This is done explicitly, as `vctrs` recycling purposefully does not recycle to partial lengths, like a vector of size 10 to a vector of size 3 or 13.

Usage

```
palette_function(x)
```

Arguments

x a palette

Value

a function which takes an integer `n` and returns a vector of `n` colors

Examples

```
palette_function(palette(roygbiv))(10)
```

plot_palette	<i>Plot Palette Colors</i>
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Description

Plot Palette Colors

Usage

```
plot_palette(x, use_names = TRUE, use_ggplot = TRUE)
```

Arguments

x a palette
use_names Should the names of the palette be used as labels? Default: TRUE.
use_ggplot Should the plot be made with `ggplot2` if available? Default: TRUE.

Value

A ggplot (if ggplot2 is available) or base plot of the palette

Examples

```
plot_palette(roygbiv)
```

roygbiv	<i>Rainbow Colors</i>
---------	-----------------------

Description

Rainbow Colors

Usage

```
roygbiv
```

Format

character vector of 7 hex codes

Examples

```
palette(roygbiv)
```

saturation	<i>Control palette saturation</i>
------------	-----------------------------------

Description

Generic function to control the saturation of a palette.

Usage

```
saturate(x, amount = 0.1, ...)
```

```
desaturate(x, amount = 0.1, ...)
```

```
## Default S3 method:
```

```
saturate(x, amount = 0.1, ...)
```

```
## S3 method for class 'palette'
```

```
saturate(x, amount = 0.1, ...)
```

```
## Default S3 method:  
desaturate(x, amount = 0.1, ...)  
  
## S3 method for class 'palette'  
desaturate(x, amount = 0.1, ...)
```

Arguments

x	A vector of colors
amount	A numeric value to control the saturation of the palette
...	Additional arguments passed to other methods. Currently ignored.

Value

A palette vector with the saturation adjusted

Examples

```
saturate(palette(roygbiv))  
desaturate(palette(roygbiv))
```

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