Package 'ggRtsy'

September 15, 2023

Type Package

Title Add Some Van Gogh Colors and Overlay Colors on Your 'ggplot()'

Version 0.1.0

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Description Works with 'ggplot2' to add a Van Gogh color palette to the user's repertoire.
It also has a function that work alongside 'ggplot2' to create more interesting data visualizations and add contextual information to the user's plots.

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Encoding UTF-8

LazyData true

Depends R (>= 2.10)

RoxygenNote 7.2.3

Imports purrr, stringr, ggplot2, tibble, magrittr, grDevices, dplyr

Suggests rmarkdown, knitr, testthat (>= 3.0.0)

Config/testthat/edition 3

VignetteBuilder knitr

NeedsCompilation no

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Repository CRAN

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R topics documented:

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goghColors   *Sampling of Colors from Van Gogh Paintings*

Description

This dataset consists of information on 986 colors across Van Gogh paintings.

Usage

    goghColors

Format

A data frame of 986 rows representing colors selected from Van Gogh's painting. 5 colors were
selected from each painting. Consists of 3 variables.

name Color name

rgb Color RGB value

hex Color hex code value

Source

Kaggle Konstantinos Katserelis <https://www.kaggle.com/datasets/pointblanc/colors-of-van-gogh?select=color_space.csv>
Note data is released under CC BY-SA 4.0

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goghPaintingSets   *Van Gogh Paintings Information*

Description

This dataset consists of information about and colors from all 1931 of Van Gogh's paintings.

Usage

    goghPaintingSets

Format

A data frame of 1931 rows representing information from Van Gogh's paintings. Consists of 6 variables.

name Painting name

colors 5 colors picked from the painting

year Year painting was painted

genre Genre of painting

style Style of painting

link Link of image of painting

Source

Kaggle Konstantinos Katserelis <https://www.kaggle.com/datasets/pointblanc/colors-of-van-gogh?select=color_space.csv> Note data is released under CC BY-SA 4.0

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gogh_interpolate   *Interpolate the color palette*

Description

Interpolate the color palette

Usage

```
gogh_interpolate(palette = "starryNight", reverse = FALSE, ...)
```

Arguments

palette	the ggRtsy painting color palette of choice
reverse	Boolean, will be TRUE if the user wants the palette reversed
...	further arguments passed to [ggRtsy::gogh_interpolate()]

Value

A color interpolation function. If 'reverse' is TRUE, it returns a reversed color interpolation function.

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gogh_palettes_pop   *Different color palettes created from Van Gogh paintings*

Description

Different color palettes created from Van Gogh paintings

Usage

```
gogh_palettes_pop
```

Format

An object of class list of length 8.

RectangleFiller   *Adds transparent coloring horizontally across a ggplot*

Description

Adds up to 5 colors of choice horizontally across a ggplot graph for data emphasis or decoration.

Usage

```
RectangleFiller(
  plot1,
  hex_codes = c("red", "blue", "green", "orange", "purple")
)
```

Arguments

plot1	a ggplot with a continuous x-axis
hex_codes	series of wanted colors

Value

ggplot item with colors

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rgbToHex *Converts RGB colors to Hex code colors*

Description

Converts RGB colors to Hex code colors

Usage

```
rgbToHex(rgbVec)
```

Arguments

rgbVec   a vector of strings in the format "(0, 72, 186)"

Details

Taking input of a vector of RGB values in the format "(0, 72, 186)", etc, and returns the corresponding hex value in the format "#0048ba"

Value

vector of hex code strings in the format "#0048ba"

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scale_color_gogh *Creating the color scale for Van Gogh Colors*

Description

Creating the color scale for Van Gogh Colors

Usage

```
scale_color_gogh(
  palette = "starryNight",
  discrete = TRUE,
  reverse = FALSE,
  ...
)
```

Arguments

palette	the ggRtsy painting color palette of choice
discrete	Boolean if color aesthetic is discrete
reverse	Boolean, will be TRUE if the user wants the palette reversed
...	further arguments passed to [ggRtsy::scale_color_gogh()]

Value

A ggplot2 color scale. If 'discrete' is TRUE, it returns a discrete color scale; otherwise, a continuous color scale.

Examples

```
if (require(ggplot2)) {
  data <- data.frame(c = LETTERS[1:3],x = c(1,5,7),y = c(5,9,13))
  ggplot(data, aes(x,y,color = c))+geom_point()+scale_color_gogh()
}
```

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scale_fill_gogh   *Creating the color fill scale for Van Gogh Colors*

Description

Creating the color fill scale for Van Gogh Colors

Usage

```
scale_fill_gogh(palette = "sunflowers", discrete = TRUE, reverse = FALSE, ...)
```

Arguments

palette	Character name of palette in gogh_palettes_pop
discrete	Boolean if color aesthetic is discrete
reverse	Boolean if the palette should be reversed
...	Additional arguments used to discrete_scale() or scale_fill_gradientn() to automatically interpolate between colors.

Value

No return value. Called for side effects.

Examples

```
if (require(ggplot2)) {
  data <- data.frame(c = LETTERS[1:3],x = c(1,5,7),y = c(5,9,13))
  ggplot(data, aes(x,fill=c))+geom_bar()+scale_fill_gogh()
}
```

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