Package ‘ggRtsy’

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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.
License CC0
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### goghColors

**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**


Note data is released under CC BY-SA 4.0

### goghPaintingSets

**Description**

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

**Usage**

```
goghPaintingSets
```
**gogh_interpolate**

**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**


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.
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
**rgbToHex**

*Converts RGB colors to Hex code colors*

**Description**

Converts RGB colors to Hex code colors

**Usage**

```r
grgbToHex(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"

---

**scale_color_gogh**

*Creating the color scale for Van Gogh Colors*

**Description**

Creating the color scale for Van Gogh Colors

**Usage**

```r
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()`
scale_fill_gogh

Value

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

Examples

```r
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()
}
```

scale_fill_gogh

Creating the color fill scale for Van Gogh Colors

Description

Creating the color fill scale for Van Gogh Colors

Usage

```r
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

```r
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,fill=c))+geom_bar()+scale_fill_gogh()
}
```
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