Package ‘paintmap’

August 31, 2016

Type Package
Title Plotting Paintmaps
Version 1.0
Date 2016-08-31
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Description Plots matrices of colours as grids of coloured squares - aka heatmaps, guaranteeing legible row and column names, without transformation of values, without re-ordering rows or columns, and without dendrograms.
License GPL (>= 2)
RoxygenNote 5.0.1
NeedsCompilation no
Repository CRAN
Date/Publication 2016-08-31 20:47:04

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Plotting paintmaps

Description

Plots matrices of colours as grids of coloured squares - aka heatmaps, guaranteeing legible row and column names, without transformation of values, without re-ordering rows or columns, and without dendrograms.

Details

The function ‘bhm’ takes a matrix of colours (i.e. a character matrix of descriptions like red or hex-codes), and creates a plot using ‘grid’ graphics.

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Examples

```
paintmap(matrix(heat.colors(9), 3, 3, dimnames=list(letters[1:3], letters[4:6])))
```

Convert numeric matrix to color (character) matrix

Description

Given a numeric matrix, assign to each cell a color (character) value based on linearly interpolating a given vector of colors.

Usage

```
color_matrix(x, colors = heat.colors(10))
```

Arguments

- `x`: Numeric or logical matrix.
- `colors`: Character vector of colors.

Value

Character matrix.
colour_matrix

Convert numeric matrix to colour (character) matrix

Description
Given a numeric matrix, assign to each cell a colour (character) value based on linearly interpolating a given vector of colours.

Usage
colour_matrix(x, colours = heat.colors(10))

Arguments

- x: Numeric or logical matrix.
- colours: Character vector of colours.

Value
Character matrix.

inches_tall

Get number of inches high a putative heatmap will be

Description
Get number of inches high a putative heatmap will be

Usage
inches_tall(x, row_lines = 1)

Arguments

- x: Character matrix of colours
- row_lines: Numeric value determining number of lines width each row of the heatmap should occupy.

Value
Numeric value.
inches_wide

Get number of inches across a putative heatmap will be

Usage

inches_wide(x, col_lines = 1)

Arguments

x  Character matrix of colours

col_lines  Numeric value determining number of lines width each column of the heatmap should occupy.

Value

Numeric value.

lines_between_hm_and_labels

Lines of space between the heatmap and row/column labels

Description

Lines of space between the heatmap and row/column labels

Usage

lines_between_hm_and_labels

Format

An object of class numeric of length 1.
**margin_lines**

*Lines of space at margins of paintmap*

**Description**

Lines of space at margins of paintmap

**Usage**

```r
margin_lines
```

**Format**

An object of class `numeric` of length 1.

---

**paintmap**

*Plot paintmap*

**Description**

Plot paintmap

**Usage**

```r
paintmap(x, add = FALSE, ...)
```

**Arguments**

- `x` : Character matrix of colours
- `add` : Add ink to current viewport.
- `...` : Other graphical parameters for the rectangles of the grid to pass to `grid` function `gpar`, in turn passed to `grid.function grid.rect`.

**Value**

Plots heatmap.

**Examples**

```r
paintmap(matrix(heat.colors(9), 3, 3, dimnames=list(letters[1:3], letters[4:6])))
```
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