

# Package ‘reportR’

July 18, 2016

**Type** Package

**Title** Miscellaneous tools to stylize reports

**Version** 1.0

**Date** 2016-05-25

**Author** Erica Wozniak

**Maintainer** Erica Wozniak <ewozniak@mcw.edu>

**Description** This package consists of of small miscellaneous functions to streamline the process of compiling attractive and consistently formatted knitr reports.

**Imports** ggplot2, grid, RColorBrewer

**License** GPL-2

**NeedsCompilation** no

## R topics documented:

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reportR-package	<i>Miscellaneous tools to stylize reports</i>
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## Description

This package consists of of small miscellaneous functions to streamline the process of compiling attractive and consistently formatted knitr reports.

## Details

The DESCRIPTION file:

Package: reportR  
Type: Package  
Title: Miscellaneous tools to stylize reports

Version: 1.0  
 Date: 2016-05-25  
 Author: Erica Wozniak  
 Maintainer: Erica Wozniak <ewozniak@mcw.edu>  
 Description: This package consists of of small miscellaneous functions to streamline the process of compiling attractive  
 Imports: ggplot2, grid, RColorBrewer  
 License: GPL-2

#### Index of help topics:

custom_theme	Customized ggplot2 theme
print_header	Customized knitr header
reportR-package	Miscellaneous tools to stylize reports
sink_css	Customized knitr CSS

This package consists of of small miscellaneous functions to streamline the process of compiling attractive and consistently formatted knitr reports, including a ggplot2 theme ([custom\\_theme](#)), a CSS file to stylize knitr documents ([sink\\_css](#)), and a function to stylize the headers of knitr documents [print\\_header](#).

#### Author(s)

Erica Wozniak  
 Maintainer: Erica Wozniak <ewozniak@mcw.edu>

#### See Also

[custom\\_theme](#) [print\\_header](#) [sink\\_css](#)

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custom_theme	<i>Customized ggplot2 theme</i>
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#### Description

This function makes presentation-ready ggplot2 plots when added as a theme to a ggplot2 function call.

#### Usage

```
custom_theme(base_size, base_family)
```

#### Arguments

base_size	Base font size for the plot. Optional; defaults to 18.
base_family	Font family for the plot. Optional; defaults to "serif".

#### Value

Returns a theme to stylize a ggplot2 graph.

**Note**

At present, an extra line space is needed after the plot title and before the x- and y-axis labels to make the plot look right. This is weird and needs fixing. See the example.

**Author(s)**

Erica Wozniak

**See Also**

[reportR](#)

**Examples**

```
library(ggplot2)

# Custom theme with defaults
ggplot(dat = cars, aes(x = speed, y = dist)) +
  geom_point() +
  ggtitle("Vehicle stopping distance vs speed\n") +
  xlab("\nSpeed (mph)") +
  ylab("\nStopping distance (ft)") +
  custom_theme()

# Custom theme with smaller labels and monospace font
ggplot(dat = cars, aes(x = speed, y = dist)) +
  geom_point() +
  ggtitle("Vehicle stopping distance vs speed\n") +
  xlab("\nSpeed (mph)") +
  ylab("\nStopping distance (ft)") +
  custom_theme(base_size = 14, base_family = "mono")
```

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print\_header

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*Customized knitr header*


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**Description**

This function prints a knitr header to the console, which can be copied and pasted to the top of an Rmd file. The header includes a ruled line underneath the document information followed by vertical whitespace.

**Usage**

```
print_header(title, author, date)
```

**Arguments**

title	Character string for document title. Required.
author	Character string for document author. Required.
date	Character string for document date. Optional; defaults to current date formatted as DD Month YYYY.

**Value**

Returns a knitr header printed to the console.

**Note**

This function assumes the document will be styled with "style.css".

**Author(s)**

Erica Wozniak

**See Also**

[reportR](#)

**Examples**

```
# Minimal required inputs
print_header(title = "Document Title",
             author = "Document Author")

# Altered date
# Minimal required inputs
print_header(title = "Document Title",
             author = "Document Author",
             date   = "7-18-16")
```

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sink\_css

*Customized knitr CSS*


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**Description**

This function sinks a Cascading Style Sheet (CSS) to the working directory (default) or a specified directory to stylize a knitr HTML document.

**Usage**

```
sink_css(dir, font_body, font_table, font_header, font_size, max_width)
```

**Arguments**

dir	Directory location to sink CSS file. Optional; defaults to current working directory.
font_body	Font used for the body of the document. Optional; defaults to Palatino Linotype.
font_table	Font used for table contents. Optional; defaults to Palatino Linotype.
font_header	Font used for table headers. Optional; defaults to Palatino Linotype.
font_size	Font size for the body of the document. Optional; defaults to 11pt.
max_width	Maximum text width for the document body. Optional; defaults to 45em.

**Value**

Returns a file called style.css to the working directory or other specified directory.

**Note**

This function has no required inputs. <br> Only the base font size can be altered at present. Other font sizes in the document are calculated relative to the specified size for the document body.

**Author(s)**

Erica Wozniak

**See Also**

[reportR](#)

**Examples**

```
# Minimal required inputs
sink_css()

# Change the fonts and widen the document output
sink_css(font_body = "Garamond",
         font_table = "Consolas",
         font_header = "Garamond",
         font_size = 14,
         max_width = 60)
```

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\*Topic **knitr, report, css, ggplot2**  
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