

Creating HTML documentation for R code via knitr::spin

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General information

The R package 'knitr' provides different functionalities. Amongst others one can create HTML and PDF documentation files from R scripts by the function 'spin' of the 'knitr' package. It generates a R documentation file (*.Rmd) first and than a html file.

By default, the script is evaluated during processing. If one does not wish the evaluation, one can deactivate this functionality. Please see examples 2 and 3 for details to deactivate the evaluation of one part and of the whole script, respectively. See also [this Question at Stackoverflow](#).

Alternatives might be [Roxygen2](#) and [RMarkdown](#).

Further reading:

- nice brief introduction on generating HTML documentation (from the author of the knitr package): [yihui.name/knitr/demo/stitch/](#)
- example R code: [github.com/yihui/knitr/blob/master/inst/examples/knitr-spin.R](#)
- resulting Rmd file: [github.com/yihui/knitr/blob/master/inst/examples/knitr-spin.Rmd](#)

HTML files can be saved to

http://phywiki.io-warnemuende.de/local_htmls/R/iow_scripts/

Who did it?

Daniel Neumann

Example data

- [example01.R](#)
- [example01.html](#)
- [example02.R](#)
- [example02.html](#)
- [example03.R](#)
- [example03.html](#)
- [example04.R](#)
- [example04.html](#)
- [generate_html_documentation.sh](#)
- [generate_html_documentation.R](#)

R script

Example 1

```

#' Calculate 1+1 and print out
#'
#' With this script we calculate the sum of 1 and 1 and print it out
#' to the command line. We print it out as integer and as 2-digit
#' float.
#'
#' @author Daniel Neumann
#' @date 2017-09-07
#' @version 1.0
#'
#' Roxygen comment parameters starting with '@' are not recognized.

#' calculate 1+1
result = 1+1

#' print the result out as integer
print(formatC(result, format='d'))

#' print the result out as integer
print(formatC(result, format='f', width=4, digits=2))

```

Save the code in a file 'example01.R' and process it in R (console or RStudio):

```
knitr::spin('example01.R')
```

Files:

- HTML file: [example01.html](#)
- R script: [example01.R](#)

Example 2

```

#' Calculate 1+1 and print out
#'
#' With this script we calculate the sum of 1 and 1 and print it out
#' to the command line. We print it out as integer and as 2-digit
#' float.
#'
#' calculate 1+1
result = 1+1

#' print the result out as integer
# do not evaluate the next 'print' command in the html documentation
#+ eval=FALSE
print(formatC(result, format='d'))

#' print the result out as integer
print(formatC(result, format='f', width=4, digits=2))

```

Save the code in a file 'example02.R' and process it in R (console or RStudio):

```
knitr::spin('example02.R')
```

Files:

- HTML file: [example02.html](#)
- R script: [example02.R](#)

Example 2

```

#' Calculate 1+1 and print out
#'
#' With this script we calculate the sum of 1 and 1 and print it out
#' to the command line. We print it out as integer and as 2-digit
#' float.
#'

# evaluate nothing at all:
#+ setup, include=FALSE
knitr::opts_chunk$set(eval = FALSE)
#+

#' calculate 1+1
result = 1+1

#' print the result out as integer
print(formatC(result, format='d'))

#' print the result out as integer
print(formatC(result, format='f', width=4, digits=2))

```

Save the code in a file 'example03.R' and process it in R (console or RStudio):

```
knitr::spin('example03.R')
```

Files:

- HTML file: [example03.html](#)
- R script: [example03.R](#)

Example 4

```

#' Calculate 1+1 and print out
#'
#' With this script we calculate the sum of 1 and 1 and print it out
#' to the command line. We print it out as integer and as 2-digit
#' float.
#'
#' Just different comments in the code

# calculate 1+1
result = 1+1

# print the result out as integer
print(formatC(result, format='d'))

# print the result out as integer
print(formatC(result, format='f', width=4, digits=2))

#' Again a comment like in the beginning

```

Save the code in a file 'example04.R' and process it in R (console or RStudio):

```
knitr::spin('example04.R')
```

Files:


- HTML file: [example04.html](#)
- R script: [example04.R](#)

Figures

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Who else is using this?

Comments

--  Daniel Neumann - 2017-09-07

I	Attachment	History	Action	Size	Date	Who	Comment
	example01.R	r1	manage	0.5 K	2017-09-07 - 14:30	DanielNeumann	
	example01.html	r1	manage	13.7 K	2017-09-07 - 14:27	DanielNeumann	
	example02.R	r1	manage	0.4 K	2017-09-07 - 14:31	DanielNeumann	
	example02.html	r1	manage	13.6 K	2017-09-07 - 14:30	DanielNeumann	
	example03.R	r1	manage	0.5 K	2017-09-07 - 14:31	DanielNeumann	
	example03.html	r1	manage	13.5 K	2017-09-07 - 14:31	DanielNeumann	
	example04.R	r1	manage	0.4 K	2017-09-07 - 14:31	DanielNeumann	
	example04.html	r1	manage	13.6 K	2017-09-07 - 14:31	DanielNeumann	

This topic: R > [WebHome](#) > Knitr_spin

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