

Introduction to RMarkdown

Peter von Rohr

2021-10-01

Resources

- ▶ <https://rmarkdown.rstudio.com/lesson-1.html>
- ▶ <https://youtu.be/tKUufzpoHDE>
- ▶ <https://bookdown.org/yihui/rmarkdown/>

What is it

- ▶ Mix of ordinary text and R-statements
- ▶ Can be translated into different output formats
 - ▶ html (websites including interactive elements)
 - ▶ pdf
 - ▶ word / powerpoint

Introduction

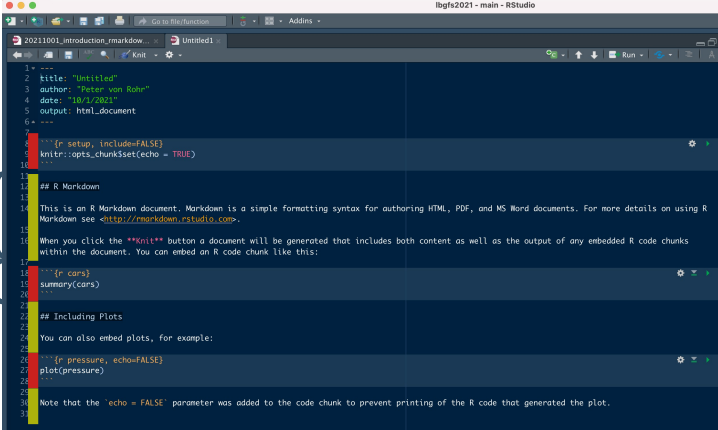
- ▶ Installation (already available on exercise platform)
- ▶ At R-Console run the following command

How does it work

RMarkdown files ...

- ▶ are text-files with the extension .Rmd
- ▶ can be generated easily in RStudio: File > New File > RMarkdown ...
- ▶ have the following structure

Structure of Rmd File



The image shows a screenshot of the RStudio interface with an R Markdown file open. The editor is divided into two main sections: a text editor on the left and a console on the right. The text editor contains the following content:

```
1 ---
2 title: "Untitled"
3 author: "Peter von Rohr"
4 date: "10/1/2021"
5 output: html_document
6 ---
7
8 ```{r setup, include=FALSE}
9 knitr::opts_chunk$set(echo = TRUE)
10 ```
11
12 ## R Markdown
13
14 This is an R Markdown document. Markdown is a simple formatting syntax for authoring HTML, PDF, and MS Word documents. For more details on using R
15 Markdown see <http://rmarkdown.rstudio.com>.
16
17 When you click the Knit button a document will be generated that includes both content as well as the output of any embedded R code chunks
18 within the document. You can embed an R code chunk like this:
19
20 ```{r cars}
21 summary(cars)
22 ```
23
24 ## Including Plots
25
26 You can also embed plots, for example:
27
28 ```{r pressure, echo=FALSE}
29 plot(pressure)
30 ```
31
32 Note that the echo = FALSE parameter was added to the code chunk to prevent printing of the R code that generated the plot.
```

Annotations on the left side of the image indicate the structure of the file:

- A bracket labeled "Text" spans lines 1 through 16.
- A bracket labeled "R-code" spans lines 18 through 26.

Produce Output



Notebook

- ▶ RMarkdown document with direct evaluation of R-code chunks
- ▶ Result is .nb.html file
- ▶ R-code can be re-generated from .nb.html file