Preparatory step

Data Vizualization in R

Intro to Rmarkdown

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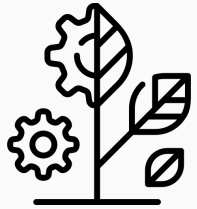

Data vizualization process

While performing data visualization, you will find yourself constantly pinging back and forth between three things:

- Writing code.
- Looking at output.
- Taking Notes.

Rmarkdown is a solution!

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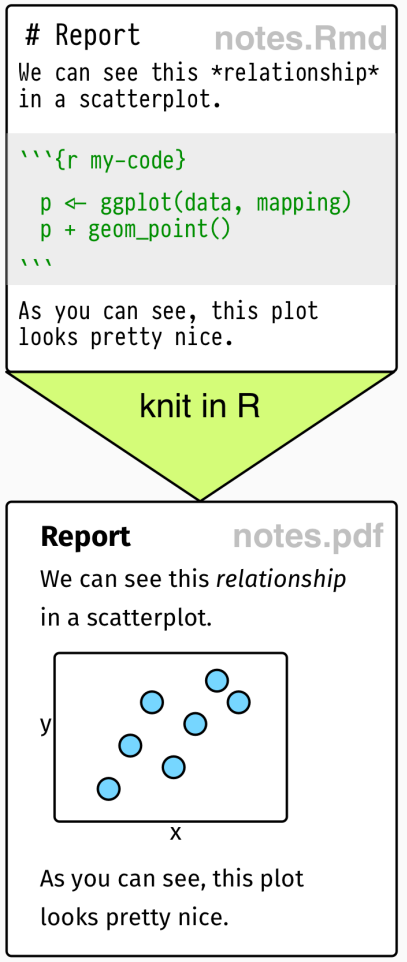
Rmarkdown is a solution!

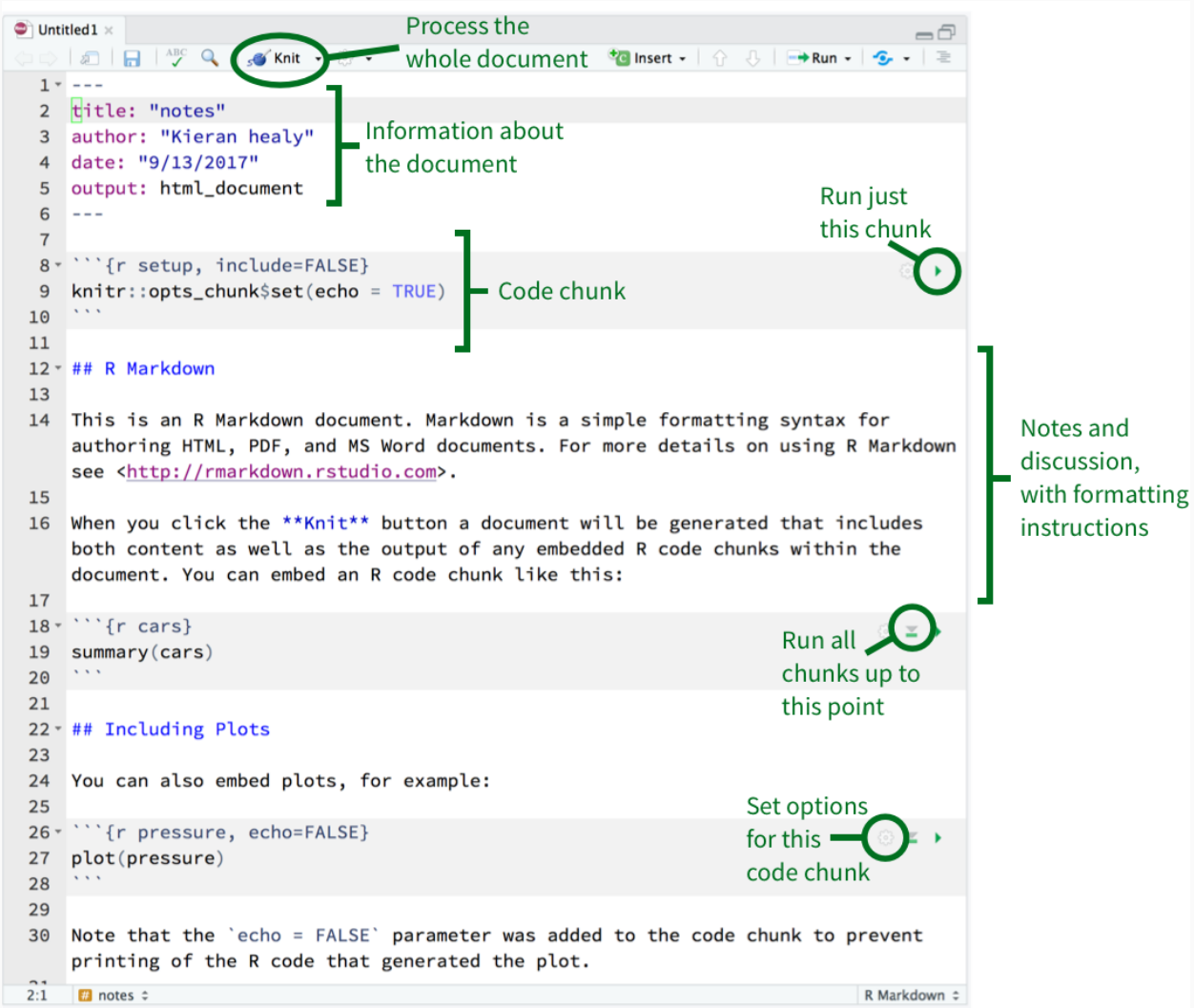
It will make your code:

- Reproducible
- Easy to adjust if your raw data changed
- Easy to communicate the results



https://socviz.co/

Rmarkdown in .Rmd file



Why do you need Rmd in the course?

Lectures and tutorials were designed in Rmarkdown (using xaringan package).

This is how the source code of the slide 2 looks like:

Tutorial1.Rmd

```
285 **Rmarkdown is a solution!**
286
287 It will make your code:
288
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290
291 - Easy to adjust if your raw data changed
292
293 - Easy to communicate the results
294 ]
295
296 .pull-right[
297
298 ```{r, out.width='60%', fig.align='center', echo= FALSE}
299 knitr::include_graphics('figs/ch-02-simple-knit-tall.png')
300
301 ```
302 ]
303
304 ???
305 Writing code. You will write a lot of code to produce plots. You will also write code to load your
    data, to look quickly at tables of that data. Sometimes you will want to summarize, rearrange,
    subset, or augment your data, or run a statistical model with it. You will want to be able to write
    that code as easily and effectively as possible.
306 Looking at output. Your code is a set of instructions that, when executed, produces the output you
    want: a table, a model, or a figure. It is often helpful to be able to see that output, and its
    partial results. While we're working, it's also useful to keep the code and the things produced by
    the code close together, if we can.
307 Taking Notes. You will also be writing about what we are doing, and what your results mean. When
    learning how to do something in ggplot, for instance, you will want to make notes to yourself about
    what you did, why you wrote it this way rather than that, or what this new concept, function, or
    instruction does. Later, when doing data analysis and making figures, you will be writing up reports
    or drafting papers.
```

Why do you need Rmd in the course?

- Lectures and tutorials were designed in Rmarkdown (using xaringan package).
- The source code for lectures and tutorials is available via GitHub

  ... so you can learn how it works
- It is better to make your project in Rmarkdown and submit it as .Rmd and .pdf files for evaluation.