Problem Set 7

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Resources

1) Read chapter 27 on `Rmarkdown` in R4DS.

2) Read through the slides on `Git`.

3) Read at least chapters 1-12 in Happy Git with R. Make sure that you make `Git` work on your computer and in `RStudio`. This is a **very** significant task! We will rely on `Git` very much for the rest of the semester. Setting up `Git` may be an awful procedure but we rely on you to stay brave and work your own way through the guide. We can add nothing to what is written in the guide on how to set it up conveniently. Also make sure that you know how to set up a new `R` project with version control in `RStudio`.

4) Optionally, complete the DataCamp Units provided on the Moodle page for this topic.

5) Read the whole problem set before starting work on it.

RMarkdown

From now on we expect you to hand in your assignments as `Rmarkdown` files. We uploaded a template on the Moodle page which you can use. (You won't need it for this problem set, though.) Always provide on `knitted` (PDF or html) version and the code via `.Rmd`.

1) We attached a very short `Rmd` file to the material of this week (`lm.Rmd`). Try to knit it. You'll find that there are some errors. Debug the markdown until there is no error anymore and the document looks nice. Work in the `.Rmd` directly and *push* it once you are done (see below).

2) We attached a PDF to the material of this week (`pem.pdf`). Try to recreate the document with the use of `Rmarkdown`, `R`, and `Latex` code. Hand in the solution in an `Rmd` file.

Git

We set up a Github classroom for this class. You find it here. In the next weeks, we will exclusively share code there. Getting familiar with `Github` is time-consuming. If everything goes right, it will suffice to use the following workflow to make changes for your projects when you work as an individual:

- `git add -A`
- `git commit -m"your commit message"`
- `git push`

(Of course, you can achieve this also by the visual editor.)

1) Have a look at the *repo for today* Philipp and Julia have been working on a research project together. David, as their supervisor, wants to know who contributed which parts of the code. Help David (please do **not** e-mail David) by answering the following questions:

- Who is responsible for which functions?

- Who contributed more to the code?

- Who pushed more often?

- Do the two have a different style?

2) Hand in this problem set via the Github classroom assignment:

(INVITATION:https://classroom.github.com/a/3dTXLLKc)

A Github classroom assignment works like the following. You open the supplied link. Then, you accept the assignment. This will clone the repository with the starter code and create your personal repo. This repo can now be used as any other in Github. Create an `R` project in `RStudio` (version control) and supply the URL of your personal repository. You can work locally now and commit changes. Once you are done with the assignment, commit your changes with the message "ALL DONE" and push them.

We expect three files from you:

- The filled skeleton for `pem_answer.Rmd`

- The corrected file `lm.Rmd`

- The filled skeleton for `git.Rmd`

If meaningful also provide the knitted (PDF or html) document. If possible, we will provide feedback in the Diff-file.

You can hand in this problem set by the 8th of June to receive feedback.