Task description

Visualization Project

1 Project Description

> "Graphical excellence is the well-designed presentation of interesting data - a matter of substance, of statistics, and of design ... It consists of complex ideas communicated with clarity, precision, and efficiency." (Edward Tufte)

In spirit of this quote, put yourself into the shoes of a data journalist and tell a visual story about some topic of your choice. I provide suggestions in terms of data and topics, but you should not feel limited by these suggestions. Please ask me if you are not sure whether the topic or scope of your project is suitable.

1.1 Scope and focus

- Focus on the most important, interesting, surprising aspects of your data set.
- Create ~4-6 plots and refine them to make them effective, aesthetically pleasing and scientifically sound.
- Remember that the goal of visualization is to make complex data patterns intuitively understandable. So ask yourself whether the chosen visualization is both interesting (not just show showing simple and obvious facts) and effective (the viewer can grasp the message).
- Prove that you are able to apply the grammar of graphics yourself. Do not use a wrapper package that implements a plot as a oneliner.

1.2 Documentation and submission

- Use R Markdown to document your work.
- Guide through your project and "tell a story" using full sentences: Motivation and relevance? Research question(s)? Data sources? Findings? Why does it matter?
- If your project involves a lot of preprocessing, you may consider putting this part into a separate script or Rmarkdown file.
- Submit all that is needed to fully reproduce your work (code + data) on Moodle, or submit a link to a public GitHub repository.
- Due date is 2022-07-07.

1.3 Grading

There are many ways in which a project can be good or very good. Factors influencing the grade include:

- Efforts in data acquisition and cleaning
- Storytelling: do the visualizations convey interesting insights?
- Adequacy and effectiveness of visualizations
- Aesthetic value: does it look good?
- Quality of documentation: clean code and clear explanations
- Reproducibility
- Innovative features: presence of aspects we did not explicitly cover in class