Assignment 2

Scope: Individually

Weight towards course grade: 50%

Due date: Thursday 16. April 2024.

Expected time investment: 15h

Description: Students work Individually to analyze, design, and implement a visualization piece. This can include interactive web visualizations, data comics, or an infographic (see below).

- **1. Challenge description:** Describe a challenge around the data (up to **500 words**, use bullet points where possible). A challenge includes:
 - **Data:** What is your data and where is it coming from?
 - **Motivation:** What do you intend to see/show with the visualizations?
 - **Audience:** who is the indented audience for this visualization and how are thy characterized?
 - **Context:** what is th context that audience is using your visualization?

How do these issues influence your design choices?

- **2. Visualization exploration:** explore visualization designs for your data and explain your rationale (**200 words per visualization = 600 words**, use bullet points where possible)
 - explore at least three different visualization designs with at least two
 iteration for your data (e.g., one design per student in the group). Include rough
 working sketches in the final submission (sketches will not be marked but show
 your thoughts and the evolution of ideas. Text can be unreadable, data be
 incomplete. Like the sketches in tutorial 2).
 - explain what does and work, what does not work, and how you iterated at each step.
- **3. Final design:** present a final design and explain your design rationale for everything that is not related to the visualization design itself as this has been stated in 2 (e.g., textual annotations, title, abstract, layout, explanations, etc). just above (up to **500 words**, use bullet points where possible). This can be on of the following three formats:
 - Infographic
 - at least 3 different types of visualizations. These can be self-invented and creative

- around 400 words on the infographic as text, abstract, story title, and any explanations. These words are not included in the 500 words that describe your rationale.
- o anything format between A3 and A0 (poster, landscape or portrait format)

• Data comic

- o at least 4 A4 pages
- at least 3 different types of visualizations. These can be self-invented and creative.
- o no word limit, no style restrictions

• Interactive visualization

- A single bespoke and creative interactive visualization, to some degree selfimplemented in D3 or processing, or
- Any other ideas, let me know ASAP and we can discuss.

Make sure you follow the instructions / exercises in tutorial 4. In your story mention:

- what is this data?
- facts about that data
- explain any unfamilar visualizations and data-related concepts
- summarize your main message

4. Feedback report and reflection (up to _500 words): For your final design,

- obtain feedback from at least 3 different persons in a structured interview. Summarize the main points.
- Use the feedback to improve your final design and mention what you did change.
- **5. Visualization tool critique:** Pick two visualization tools (does not inlude SVG tools!), e.g., from the ones discussed in class, and discuss (up to **1000** words):
 - what's the overall purpose of this tool?
 - the range of visualizations and the quality of its output (e.g., readability, colors, graphics, etc..)
 - the general workflow and possible interactions
 - which skills are required and what makes it tricky to learn the tool?
 - any special useful features
 - advantages and things you found useful
 - disadvantages and things you found hard
 - potential ideas for future features and general improvement
 - how each tool supported your design / workflow.

Use bullet points wherever possible.

For Assignment 2, **hand in as a single PDF** with either

- graphics included, or
- web links (make sure they work and are permanent during the marking period).
 Learn might have an upload limit.

Marking scheme:

| Task | Max-points |
|---|------------|
| Challenge description | 20 |
| Visualization exploration | 20 |
| Final design | 30 |
| Design feedback | 10 |
| Tool critique | 20 |
| Extra points: Creativity of proposed visualization(s) | 4 |
| Total: | 100 |