Course Project

Introduction

- In this project, you will apply the visualization techniques and design considerations you have learned to visualize some data sets of your own choice.

- This is a group project and you are required to work in groups of 3 or 4.

- It is expected that each of you will spend approximately a total of 60 hours on the project.

- You will be graded individually.

Schedule

Stages	Deadline
Grouping Submission	Sep 24
Project Proposal Submission	Oct 8
Final Report and Work Package Submission	Nov 19
Presentation	Nov 23, 24, 30 (tentative)

Project Proposal

- Each group should submit a proposal (max. 2 A4 pages in PDF format) describing what you will do for the project. The proposal should include, but not limited to:
  - Project title.
  - Names of students in your group, with student IDs.
  - Project objectives. What is to be visualized and what is the goal?
  - The source and the background of the data that you would like to visualize. You will need to find the data on your own. Your data should contain at least six attributes. You are also encouraged to use data from multiple data sources instead of one.
  - The questions that you would ask about the data set.
  - A list of tasks to be accomplished.
  - The visualization tools or approaches that you plan to use to accomplish the intended tasks, and the justifications supporting your choices.
  - Division of labour among the group members.

Project Proposal

- The purpose of the proposal is to help you define the project scope and consolidate your ideas.

- The instructor and the TAs may give you feedback so that adjustment can be made if necessary.

- Note that you may change your mind at a later stage and use a design or a tool other than that specified in your original proposal.

Project Report

- Each group needs to submit a final report for the course project.

- A self-contained document in PDF format, of max. 20 A4 pages

- The report should include, but not limited to

  - Visualizations that you have created
  - Explanation of the effective of your visualizations, in association with their purposes (e.g., descriptive / explorative)
  - Any new insights?
  - Difficulties that you have encountered
  - Different methods that you have tried
  - Justification of your choices
  - Anything you wanted to do but haven't? Why?
  - Any limitations to the existing tool?

- Your report should state clearly the tasks completed by each of the team members

- Make smart use of graphics in your report.

Project Report

- What to submit?
  - A single zipped file containing:
    - The final report in PDF format
    - Other results in any format that you think is appropriate. We are flexible and so be creative in the presentation. Video clips and online demos are some of the options.
    - An **index.htm** file that serves as a starting page to access all the submitted files (e.g., a readme document containing instructions to try out and assess your work, links to online Tableau dashboards you've created)

Presentation

- Each student will need to present, and each of you will have only 2-3 minutes.

- Can only show at most 3-4 of your best visualization

- Graded by peers & TA & instructor

- More details (e.g., duration, format) to come later

Assessment Criteria

- how you process and compile your data for the purpose of a meaningful visualization

- how you apply proper visualization design rationales and techniques

- how you make use of your visualization as a tool to explore your data set and obtain new insights from it

Rubrics

Achievement	Grade
Pure data presentation	F to D
Descriptive visualization that shows pattern and trends	C to B
Explorative visualization	B to A
Explorative visualization with new insights / own design of visualization tools	B+ up

Specific grade within range also depends on the quality of work, complexity of variables, dimensionality of variables, utilization of multiple data sources, etc.