

## Course Project 2016

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 2 or 3. It is expected that each of you will spend approximately a total of 60 hours on the project. Note that *you will be graded individually*.

### Stage 1: Project Proposal

*Due date: 11:59pm, Feb 20*

Each group should submit a proposal (max. 2 A4 pages) describing what you will do for the project. The proposal should include, but not limited to:

- Names of students in your group, with student IDs.
- Project title.
- 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.

The purpose of the proposal is to help you define the project scope and consolidate your ideas. The instructor and the TAs will also 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.

### Stage 2: Final report

*Due date: 11:59pm, Apr 2*

Each group needs to submit a final report for the course project. The report should be self-contained and hence should include the basic information and background for your project. It should also detail the process that you have gone through to arrive at your final results. Your report should therefore include, but again not limited to

- the difficulties that you have encountered;
- the different visualization approaches that you have tried;
- the visualization techniques that are realized in your results;
- the explanation for your choice of techniques;
- how your visualization can help answer the queries or questions you have on the data set;
- any new insights on the data set that you found using your visualization;
- any visualization or functionalities that you think should have included, but have not done so.

The final report should be of no more than 20 A4 pages. You should also state clearly the tasks completed by each of the team members. Make smart use of graphics in your report.

### **Stage 3: In-class presentation**

Details to be announced later.

### **Assessment Criteria**

The assessment will be based on the followings:

- 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

Hence, you should provide sufficient explanation and justification of your decisions, and demonstrate the efficacy of your visualization with appropriate examples in your final report.