School of Software and Electrical Engineering

COS30045 Data Visualisation

Data Visualisation Project Process Book

Introduction

The Project Process Book is where you document the development of your data and design process. The Project Process Book is the major piece of assessment that should demonstrate that you have achieved the unit learning outcomes. The following is a template to help you structure your Process Book. Assessment Criteria are detailed on Canvas page. Please read them carefully.

A 50% penalty applied to this item if visualisation does not address this semester's Project Topic. Please check with your tutor if you are unsure if your visualisation addresses the Project Topic before doing any major work.

Visualisation Process Book

Title Page

Includes:

- descriptive title (e.g., 'Data Visualisation Project' is not acceptable)
- link to Mercury hosted website (must be on title page)
- team name and student names and IDs
- tutorial day and time
- year and semester
- word count

Table of Contents

1 Introduction

1.1 Background and Motivation

Who will use, or be interested in, this visualisation (i.e., users)? What kind of tasks will they want to do? Why is it important?

1.2 Visualisation Purpose

What questions will the user be able to answer with your visualisation? List the possible benefits of the completed visualisation.

1.3 Project Schedule

Make sure that you plan your work so that you can avoid a big rush right before the final project deadline. Write this in terms of weekly deadlines.

2 Data

2.1 Data Source

From where and how are you collecting your data? Provide a link to your data sources. What type of data set is it (e.g., table, network, field)? What are the attributes in your data set and what type of data are the values (i.e., categorical, ordinal, interval, ratio/quantitative)? Is there any data in the set that will not be included in your visualisation? Why?

NOTE: Make sure that the data can be used to answer the questions outlined in Section 1.2.

2.2 Data Processing

Do you expect to do substantial data cleanup? What quantities do you plan to derive from your data? How will data processing be implemented? Will you be deriving any variables?

Describe clean up process that was implemented. Explanation and calculation of derived variables (if used).

3 Requirements

3.1 Must-Have Features

These are features without which you would consider your project to be a failure. Were you able to deliver all the promised features? If not, explain why.

3.2 Optional Features

Those features which you consider would be nice to have, but not critical. Were you able to deliver any of these extra features?

4 Visualisation Design

How will you display your data? Provide some general ideas that you have for the visualisation design. Include sketches of your design. Include at lease 2-3 alternative ideas for your visualisation. Describe and justify your choice of visual encoding and idioms. Show the evolution of your design. How has it progressed? Justify the visualisation idioms you have chosen to represent your data.

Description (including screen shots) and explanation of final design.

[NOTE 1: You are encouraged to provide your own structure to this section (i.e., section headings etc).

NOTE 2: You MUST show evidence of iterative design (i.e., sketches of alternative and preliminary designs).]

Include screenshots of final design.

5 Validation [optional - Bonus Points]

Test your visualisation with users and report the results.

6 Conclusion

Provide a summary of the project and what you learnt from doing it.

References

References consulted (blogs, books, academic papers, discussion/help forums - for both design and programming)