FIT5147 Narrative Visualisation Project

In this project, you are asked to create an **interactive narrative visualisation** that communicates some of your findings from the *Data Exploration Project*.

It is an **individual assignment** and **worth 40%** of your total mark for FIT5147.

Relevant learning outcome

- Choose appropriate data visualisations.
- Implement interactive data visualisations using **R (Shiny)** or **JavaScript (D3)**.

Overview of the tasks

1. Identify which findings from the Data Exploration Project you wish to communicate. You do not need to use everything you have found, be selective. You should try to answer your research questions.
2. Clearly define the intended audience. The audience might be your classmates, the general public, politicians or whoever you like.
3. Design an **interactive narrative visualisation** using the five design sheet methodology.
4. Prepare a short presentation based on your five design sheets (one sheet per slide). More information about the presentation will be provided later on Moodle.
5. Implement your visualisation as a web-based presentation **using R (Shiny)** or **JavaScript (D3)**. The use of other tools/visualisation library/visualisation software is subject to approval by your tutor. Specifically for R, you are not allowed to use the R markdown.
6. Write a report and export it to PDF.
7. Submit the report and source codes.

Report structure

Write a 15-pages (excluding bibliography, table of content, cover page, appendix) report consists of the following sections:

1. *Project title*
   Title of the narrative visualisation. This can be included in the cover page.
2. *Your identity*.
   Your full name, student ID, Lab number, and tutor name. This can be included in the cover page.
3. *Introduction*
   A precise description of what messages you wanted your narrative visualisation to convey and who the intended audience is.
4. *Design*
   This section contains a description of the visualisation design process. This summarises the five design sheets (i.e. details alternatives designs you considered and justifications of your final design).
5. *Implementation*
   This section contains a high-level description of the implementation, including libraries used and reasons for the implementation decisions. You are not expected to explain the codes in detail.

6. *User guide*
   This section contains instructions for viewing and exploring your narrative visualisation.
7. *Conclusion*
   Summarise your findings and what you have achieved. Reflect on what you have learnt in this project, including what in hindsight you might have done differently to improve the result.
8. *Bibliography*
   Appropriate references. Refer to this page to see appropriate referencing styles.
9. *Appendix*
   Place your five design sheets in the appendix. Make sure you provide clear images.

Your report should contain high-quality images of the visualisation. You should also briefly explain any reasons why your project was challenging (e.g. extensive data set, advance use of D3, etc.) in your report.

Marking Criteria

1. **Design [15%]**
   a. Appropriate use of five design sheet methodology and evaluation of alternatives [5%].
   b. Quality of final design: clear signposting of messages and intended narrative, provision of appropriate context for the reader, good use of colour, references to data sources and appropriateness for the intended audience [7%].
   c. Justification of final design in terms of the human perceptual system and human communication assumptions [3%].
2. **Implementation** [7%]
   a. Correctness and robustness, speed, accessibility [5%].
   b. Comments and code quality [2%].
3. **Difficulty [10%]**
   Degree of difficulty, e.g.Use different sources of non-tabular data very well, dealing with large dataset, advanced D3 programming/advanced R(shiny) programming sophisticated user interaction (e.g. animation, linked interaction)**.**
4. **Presentation [3%]**
   a. Quality of oral presentation (confidence, speed, voice) and quality of slides (legibility, design, images) [1%].
   b. Logical structure [1%].
   c. Choice of content (completeness, appropriate level, discussion of design and implementation alternatives) [1%].
5. **Report [5%]**
   a. Quality of writing, referencing, images, logical structure [1.5%].
   b. Completeness [3.5%].

Submission due dates

- Submit presentation slides to Moodle by **Friday, 23 October 2020, 5:00 PM** (Presentations will be done in Week 11 & 12, During your lab.)
- Submit a PDF report and a zip file to Moodle by **Monday, 16 November 2020, 5:00 PM**.
  NOTE: Times are expressed in Aust/Melbourne local time

How to submit

Once you have completed your work, The following files are to be submitted:

- **Presentation slides** containing your five design sheets. Name the file **StudentName_StudentID_Presentation.pdf** and submitted via Moodle (i.e., Assessments/Presentation)
- **A PDF report** (max 15 pages) and **a zipped file** containing your visualisation source code and any data files that are needed to run your code. Please ensure you name the file correctly using the following format:
    - **StudentName_StudentID_Report.pdf**
    - **StudentName_StudentID_Code.zip**

  These **two files (i.e., .pdf and .zip)** must be submitted via Moodle (i.e., Assessments/ Visualisation Project Code). Do not zip these files into one zip archive, submit two independent PDF file and zip file.

Please note we cannot mark any work submitted via email or sharing via GDrive. Please ensure that you submit correctly via Moodle since it is only in this process that you complete the required student declaration without which work cannot be assessed.

It is your responsibility to **ENSURE** that the files you submit are the correct files - we strongly recommend after uploading a submission, and prior to actually submitting in Moodle, that you download the submission and double-check its contents.

Your assignment **MUST** show a status of "Submitted for grading" before it will be marked.

If your submission shows a status of "Draft (not submitted)" **it will not be assessed and will incur late penalties if submitted after the due date/time.**

Note that you DO NOT need to publish your app on the web.

Late submissions and special consideration

- We encourage everyone to submit the presentation slide on time. We give **zero mark for late Presentation Slides submission**.
- For Visualisation(i.e., report and code), Assessments received after the submission deadline, or after the extended submission date for those with special consideration, will be **penalised at 5% of total mark [33%] per day for a maximum penalty period of ten (10) consecutive days.**
- If an **assessment is received after the penalty period, then zero marks will be awarded.**
- For further information on eligibility for **Special Consideration**, please refer to the relevant section on the Assessment page on Moodle.

Resubmissions

If you are retaking this unit from a previous semester, please ensure you choose a completely new topic and dataset.