INFS 5116 – DATA VISUALISATION

Visualisation Project Report (SP5 2023)
Due 26 November by 11pm

General instructions:

- This assignment is worth 50% of your final grade and it is due no later than **11pm on Sunday 26 November**.

- You will need to submit your assignment via learn**online**.

- The submitted assignment needs to be a **single file** in pdf file format.

- This assignment will be marked out of 50.

Assessment aim:

The aim of the *Visualisation Project Report* is to give you an opportunity to demonstrate your knowledge and skills in data visualisation and storytelling with data. This includes not only your ability to use relevant tools to produce visualisations, but also your knowledge and application of principles underpinning the production of efficient and effective graphics plus your skills in telling a data story.

Assessment requirements:

- Your final submission should be in a report format. You should focus on storytelling with graphics. There is no word limit but you should aim for no more than 15 pages (absolute max) excluding any appendices.

- You should present a range of visualisations of different types that show features of your data from multiple perspectives as well as address a range of questions of interest.

- You can use different tools to produce your visualisations. If you choose to use different tools, ensure that your graphics have a unified look, e.g. colour palette, fonts and chart apparatus. You should use ggplot2 to produce at least two of the graphics.

- Your submission will be assessed not only on the quality and the design of your visualisations but also on your discussion of insights and conclusions that can be drawn from your visualisations, and the extent to which your visuals and text work together to produce a compelling narrative.

Submission instructions:

The structure of your *Visualisation Project Report* should be as follows:

Title page

Include the following:

- A meaningful title of your project based on your project topic, with 'Visualisation Project Report' as a subtitle;

- Your name and student ID number.

Dashboard

Design and include here a 'dashboard' that provides a visual summary of your key findings. Ensure your dashboard follows the guidelines discussed in this course! **Note:** You do not need to use specialised dashboard software.

Use key visualisations from your report and take the time to arrange them into an effective summary of key findings from your project. Do this last, after you have finalised visualisations to be part of your data story. Do not introduce new visualisations.

1. *Introduction*

   Describe is some detail the context for the project and the key question(s) you aim to address using visualisations. In other words, what is the 'Big Idea' for your project?

   Even though you may have explained the context and purpose of the project in your Visualisation project plan, this information should be included again and revised as appropriate based on feedback you received previously and on the results of your data exploration.

   One paragraph (up to 1/2 page) is sufficient.

2. *Visualisation Results*

   Present and discuss your visualisations here. You can rename this section if you wish and divide it into subsections as you see fit.

   Aim to tell a story with your graphics (8 to 10 of different types and levels of complexity) and focus on the context of the data you are using for this project.

   This is the main part of your final report, where you showcase the skills you have developed for communicating with graphics. Your graphics plus commentary should work together to produce a coherent narrative. In other words, this is where you present your data story.

3. *Conclusions*

   Include your overall conclusions here.

   One short paragraph (up to 1/2 page) is sufficient.

4. References

Provide a list of all references that you have cited in the project.

Appendix

Describe your data sources here.

You can also provide variable definitions, as well as code, examples of story boards or any other technical and non-technical information you think is useful to include in support of the work presented in the main body of the report.

Assessment criteria:

A grade will be allocated by applying the following criteria:

- The extent to which you demonstrate engagement with your topic by providing sufficient context for your visualisation results and drawing meaningful conclusions (28%).
- Quality and effectiveness of your visualisations (30%).
- The extent to which you were able to construct a compelling narrative using your graphics (visualisation for communication) (30%).
- The effectiveness of your dashboard as a visual summary for the project (12%).

Additional assessment advice:

- The planning work you carried out for **Visualisation Project Plan** should guide you in completing your final project. Please ensure that you address the feedback you have received on your plan and follow up on suggestions for improvements that have been provided to you.
- You should take the time to design your graphics as well as your dashboard for **efficiency** and **effectiveness**.
- Avoid pie charts and remember to consider all design elements, including appropriate annotations for your graphics.
- Try for a range of types of graphics but ensure that they are 'right' for the data you have and the story you intend to tell using those graphics.
- You need to focus on storytelling with your graphics. Aim to present a compelling narrative that addresses your project topic, not the process you went through to complete the project.
- Interpret rather than simply describe your graphics; what's the 'Big Idea' behind them? How do they help you tell your story?
- **Less is more!** Aim to get to the point quickly and get your graphics to do most of the talking.