

COMP8054 Assignment #1

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1 KNOWLEDGE REPRESENTATION

The purpose of this assignment is to assess the following **Learning Outcomes**:

- LO1 Discuss data visualisation techniques and principles.
- LO2 Appraise the suitability of a variety of visualisation techniques for the web.
- LO3 Apply a data visualisation technique to a data source.
- LO4 Evaluate the suitability of interactive functionality incorporated into a visualisation technique.

“Describe and discuss an appropriate data visualisation technique for a specified data domain. Provide a rationale for both the visualisation technique and the interactivity features chosen.”

What you are discussing is what lead to the selection of a particular visualisation technique, it's appropriateness for the domain in question, an objective critique of the approach taken. Is there anything you would have done differently? Any suggested improvements? (Are these evidence-based)

1.1 SUGGESTIONS

Read three/four case studies that are relevant to the topic.

- Who, What, Where, When and Why
- Marking scheme read it and build your material around that scheme

- Layout Abstract, Introduction, related work, main body, conclusions
- Reference your support material correctly give credit where it is due.
- Capture the most important points from any referenced work, then capture your thoughts in clear concise points, support these with evidence.
- Edit your drafts early, set yourself deadlines and stick to them.

1.2 MARKING SCHEME

A holistic view of the work produced is undertaken:

- Evidence of having read and understanding a number of authoritative sources of information (white papers, research papers not googled “top 5 data visualisations”)
- An idea developed over time, not last minute.
- Good layout: intro, body conclusions
- Have you demonstrated that you understand what you are talking about?
- Good grammar, intelligent layout, and structuring of sentences/arguments - this is only possible when the drafts of the essay have been consistently read over and re-edited!
- Have you demonstrated competency in generating visualisation techniques (screenshots of exemplars and or screenshots of prototypes)

2 SUBMISSION

You submission will contain:

- A 1500 word report ≤ 7 pages in “.pdf” format.
- Embedded in the pdf - A link to an online walk through (Google drive .mp4) - 10 minute video demoing your work, articulating your approach and the rationale for the visualisation approach taken. (REQUIRED - practice with <https://www.screencastify.com/>)

Prepare your submission by archiving it as a single “.pdf” file using the following naming convention.

“A1_COMP8054_<Surname>_<First name>_<Student Number>.pdf”

e.g.

“A1_COMP8054_OReilly_Ruairi_R123456.zip”

2.1 WORD COUNT - 1500 WORD MAX

In preparing your submission it is important that you demonstrate an understanding of the underlying theory as applied in the context of the chosen domain. There is a suggested word limit of 500 words per question, your ability to articulate your answer succinctly is indicative of a deeper understanding in itself. I **highly recommend** the use of well formatted tables/visuals for any results if they aid the message you are trying to convey. Boilerplate text articulating “what a bar chart is” and “what a pie chart is” should be kept succinct and to the point.

2.2 SUBMISSION PENALTIES

- Late submissions will be penalised (-10 **points** for ≤ 1 week late, -20 **points** for > 1 week late AND ≤ 2 weeks late and **no submission accepted** after 2 weeks.
- Specified deadline is a **hard deadline** - requests for extension will not be considered (there is a formal process for individual extenuating circumstances that can be applied for via your programme coordinator e.g. medically certified illness, bereavement etc.).
- Failure to comply with submission guidelines will also result in a penalty (-10 **points**).

Tip: You do not need to be a genius to setup your workspace so it complies with the above requirements and you can do it today. Ensure you are comfortable with your coding environment, start reading and start taking notes. Use support sessions to discuss drafts of your work and get feedback - some students leave this till last minute which ends up causing undue stress, error and a reduction in the grade awarded.

2.3 SUBMISSION DATE

This assignment is due on Sunday of Week 6 by 23:59.