

Assignment 1

20 Points Possible

Attempt 1

NEXT UP: Review Feedback

Offline Score: N/A

Add Comment

Unlimited Attempts Allowed

Details

Context:

This assessment will examine your understanding of data visualization and the fundamentals of Data Visualization. In particular, you will be asked to create a report up to 8 pages using this template on “How would you visualize this data?”

Topic: How would you visualize this data?

Preparation:

To start your assignment, you will be asked to visualize. These data might be from your previous studies, or you might be asked to visualize some data you've obtained from elsewhere as long as your data contain at least 5 attributes (columns) with at least 3 different data types.

Tasks:

In your report, you are asked to describe and argue with appropriate references:

1. The nature of the data: what do those data represent/describe? how were they originally collected? (This is not asking where 'you' obtained this dataset from.)
2. Who are the consumers of such data? Why did they need this dataset? How are they using this dataset?
3. How are those data typically depicted or conveyed to those audiences? Present your explanation/argument with respect to data types and why the data needed to be visually represented in a certain way.



4. What sort of questions are asked and answered through such typical visualization you've mentioned in #3?
5. What might be typical mistakes people make in depicting those data?
6. How would YOU visualise those data differently? Using the symbolic representations from Semiology of Graphics, describe and explain how you would define the imposition of your visualisation, and how you would assign each data type to various visual variables.
7. Provide a sample of your visualization derived from the symbolic representation from #6. (You can use any visualization tool to create your visualization or you can provide hand sketches).
8. Explain how you derived your visualisation in #7 from the symbolic representation in #6.
9. Derive an equivalent but different symbolic representation of your answer from #6, and explain the equivalency. Simply reallocating different data elements to the different axis/visual variables within the same symbolic representation will not attract any marks.
10. Provide an example of your alternative visualization derived from the symbolic representation from #9, and describe/used for the axes and various visual variables your visualization or you can provide hand sketches

Academic Integrity:

This is an individually assessed task. You are not allowed to collaborate with your colleagues. If you use any electronic resources (e.g. internet, etc) other than the material provided in the assignment, you must provide appropriate references/citations. For more details on Academic Integrity, please refer to the TurnItIn submission will be checked for plagiarism against all assignments (including past assignments) using TurnItIn.

The use of Generative AI tools

The use of Generative AI tools to create any content included in your report is prohibited. The use of digital tools including Generative AI tools is permitted for the purpose of improving your English or proofreading. If you used any digital tools including Generative AI tools, you must provide appropriate citations/references describing the source and how it was used. You also need to keep records of the prompts you have used and the output you received from the digital tools. You may be asked to provide such records to validate the attribution of your work. Failing to provide the required record may result in being reported to the academic integrity case and facing potential disciplinary actions.

Submission:

Write your report(up to pages)using this template.

(<https://ledstem.org/laulcourses/16881/resources7download=18112>)_We use this format and set the maximum page number in order to make the amount of work presented and processed by the markers consistent across all students. Not complying with the provided template will result in a

reduction of 5 marks.

Use this Canvas site to submit your report in the form of a PDF file, so that it can be checked using Turnitin.

Due:

The due is 13 Sep 2024 23:59.

Academic integrity

While the University is aware that the vast majority of students and staff act ethically and honestly, it is opposed to and will not tolerate academic integrity breaches and will react appropriately.

Further information on academic integrity, and the resources available to all students can be found on the academic integrity pages on the current students website:

<https://sydney.edu.au/students/academic-integrity.htm> (<https://sydney.edu.au/students/academic-integrity.htm>).

You may only use generative AI tools in assessment tasks if you are permitted to by your course. You must acknowledge this in your work, either in a footnote or in the body of the work. AI please refer to the guidance on acknowledging AI use (<https://sydney.edu.au/students/academic-integrity.htm>).

We use Turnitin, which includes a plagiarism checker, to detect academic integrity breaches. Your teacher will inform you if you have an academic integrity breach.

Further information for on research integrity ethics can be found on the current students website:

<https://sydney.edu.au/students/researchintegrityethics.html> (<https://sydney.edu.au/students/researchintegrityethics.html>).

Compliance statement

In submitting this work, I acknowledge I have understood the following:

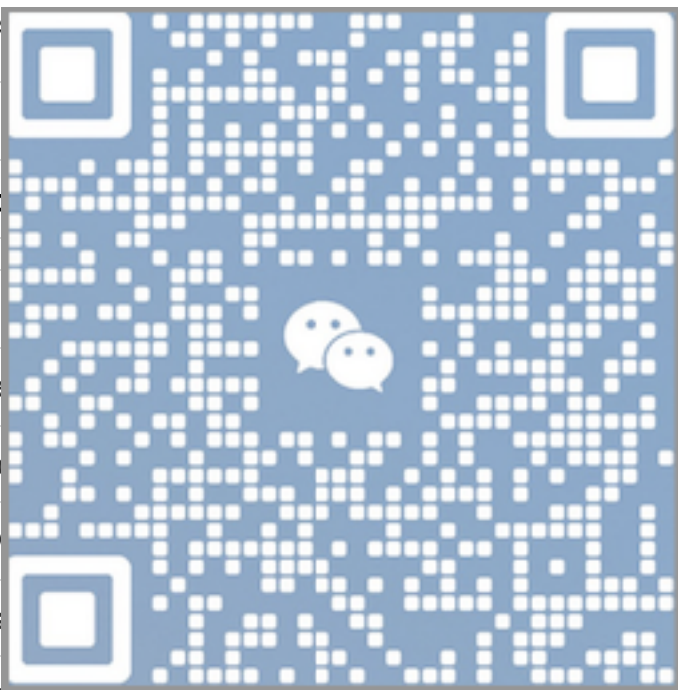
- I have read and understood the University of Sydney's Academic Integrity Policy (<https://sydney.edu.au/policies/showdoc.aspx?docnum=PDOC2012/2548&rendNum=9>).
- The work is substantially my own and, where any parts of this work are not my own, I have indicated this by acknowledging the source of those parts of the work and clearly indicated any quoted text by quotation marks or indentation according to accepted style standards.

- I have acknowledged any assistance provided in preparing the work including the use of copyediting, proofreading and automated writing and drawing tools (including artificial intelligence (AI), reference generators, translation software, grammar checkers, but not spell checkers).
- The work has not previously been submitted in part or in full to any online or print repository by me or my institution's coordinator to do so
- The work will be submitted to similarity detection software Turnitin and a copy of the work will be retained in its original repository for future similarity checking.

You are advised to keep copies of your assignment submission, drafts and any other research materials as evidence of your research and writing process. If you have used AI in the completion of your assignment, you should keep copies of the AI outputs.

View Rubric

Understanding Data Type

		Ratings	Pts
Understanding Data Type			
			Pts
1. Understanding Data type			/1 pts
2. Understanding Audience			/1 pts
3. Understanding Data Type			/1 pts
4. Understanding Visualisation		Description	/1 pts
5. Understanding Bad Visualisation. view longer description			/1 pts
6. Understanding and using the Semiology of Graphics view longer description			/4 pts
7. Implementation of Visualisation view longer description			/2 pts
8. Implementation of symbolic representations view longer description			/3 pts
9. Using the Semiology of Graphics view longer description			/3 pts
10. Application of the Semiology of Graphics view longer description			/3 pts