



COS30045 Data Visualisation

Data Visualisation Project: Summary

Project Summary	
ULO	<p>Critically evaluate data visualisations and propose improvements based on an understanding of human perception and cognition and data visualisation design principles.</p> <p>Apply a structured design process to create effective visualisations.</p> <p>Conceptualise and iterate data visualisation designs using sketching and low fidelity prototyping techniques.</p> <p>Create web-based interactive data visualisations using a real-world data set.</p> <p>Generic skills</p> <ul style="list-style-type: none">■ Communication skills■ Team work skills■ Digital literacy
Purpose:	<p>This assessment is a major assessment item and should demonstrate mastery of all the unit learning outcomes. For this assessment item you will research, design and build an interactive data visualisation for the web related to the Semester Topic specified in this document.</p>
Weight	<p>This assessment is worth 65% of the unit.</p> <p>Submit via Canvas.</p>
Group/Individual	<p>This assessment has group and individual components</p>
Group Size	<p>2</p>
Deliverables	<p>See below</p>
Marking Criteria Overview	<p>Report must demonstrate an understanding of:</p> <ul style="list-style-type: none">■ the context of this semester's Topic■ data and data encoding guidelines■ data visualisation guidelines and evidence of iterative design■ programming interactive data visualisations for the web <p>Use in-text referencing and reference section according to Harvard style where appropriate</p>
Additional Criteria	<p>English expression, visual presentation and academic integrity</p>
Word Limit	<p>NA</p>
Late Penalty	<p>10% of achieved mark per day</p>

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Introduction

For this assessment you will apply a structured iterative design process to research design and build an interactive data visualisation and present it on a website. The website is to be hosted on Swinburne's Mercury server (see guide to connecting to the server on Canvas) and must related to the Project Topic as specified below.

The deliverables for the Data Visualisation Project are as follows:

Deliverables		Marks	Due
Four Stand-Up Meetings	Group/Individual	5	Week 4, Week 10, Week 11 and Week 12
Design Process Book	Group	30	Week 14 (two weeks after semester)
Website	Group	20	Week 14 (two weeks after semester)
Project Reflection and Peer Review	Individual	15	Week 13 (one week after semester)

Please note the distribution of marks for the different deliverables. **Detailed information about each of these deliverables is available on Canvas.** Please read them carefully.

2022 Project Topic

Sustainability: Energy

Swinburne is committed to helping individuals and society work towards a more [sustainable future](#). In this Project you will be designing and building a visualisation to help us realise this ambition. In particular we would like you to focus on visualisations related to Energy production and or use. Your visualisation might be aimed at any one or more of the following, helping people:

- understand the energy use profile of their region, or other regions around the world
- understand the environmental impact of different types of energy
- understand their personal energy use
- minimise and/or monitor personal, community, or business/corporation energy use

Your visualisation must relate to this topic. Substantial penalties apply for not addressing the Topic.

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 whether your visualisation addresses the Project Topic before doing any major work.