School of Software and Electrical Engineering

COS30045 Data Visualisation

Data Visualisation Project: Summary

Project Summary	
ILO	Critically evaluate data visualisations and propose improvements based on an understanding of human perception and cognition and data visualisation design principles. Apply a structured design process to create effective visualisations. Conceptualise and iterate data visualisation designs using sketching and low fidelity prototyping techniques. Create web-based interactive data visualisations using a real-world data set. Generic skills ■ Communication skills ■ Team work skills ■ Digital literacy
Purpose:	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.
Weight	This assessment is worth 65% of the unit. Submit via Canvas.
Group/Individual	This assessment has group and individual components
Group Size	2
Deliverables	See below
Marking Criteria Overview	Report must demonstrate an understanding of: ■ 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 Use in-text referencing and reference section according to Harvard style where appropriate
Additional Criteria	English expression, visual presentation and academic integrity
Word Limit	NA
Late Penalty	10% of achieved mark per day

Continued…

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	Activity Block 2, Activity Block 4, Activity Block 5, Activity Block 6 (in tutorial)
Design Process Book	Group	30	Week 14 (two weeks after semester)
Website	Group	20	Week 14 (two weeks after semester)
Project Reflection	Individual	10	Week 13 (one week after semester)
Project Interview	Individual		Week 14 Optional in case of group issues

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.

2021 Project Topic

Sustainability: Waste

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 waste. Your visualisation might be aimed at any one or more of the following:

- helping people understand the size and/or impact of waste on the environment
- helping people understand their personal contribution to the problem of waste
- helping people minimise their contribution to waste

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.