COS30045 Data Visualisation

Data Visualisation Project: Summary



Project Summary				
ULO	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			

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 Meet-ings	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.

2023 Project Topic

Global Issues: Migration

Since the earliest times, humanity has been on the move. Some people move in search of work or economic opportunities, to join family, or to study. Others move to escape conflict, persecution, terrorism, or human rights violations. Still others move in response to the adverse effects of climate change, natural disasters, or other environmental factors. (UN - Migration)

Increasingly more and more people are being displaced from their homes due to world events. Where these people go and what happens to them is a highly politicised issue in many countries. In this Project we want you to explore the issue of migration with a focus recent events (i.e., last 5-10 years note your historical data can go back further than this, but only so much as it puts a 'recent' event in context).

You will design and build a visualisation to help us understand the context and patterns of human migration. For example,

- patterns of migration between one or more countries
- displacement due to conflict, natural disasters etc
- migration and climate change (e.g., rising sea levels, extreme weather events, food security etc)
- migration in context (e.g., attitudes towards migration, population growth and decline, etc)

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.