



# COS30045 Data Visualisation

## Data Visualisation Project: Website and Visualisation

### Introduction

The Data Visualisation website is a major part of your assessment. It is expected that you program your visualisations in D3. However, if it becomes evident that you cannot achieve your vision using D3 in the time required then other tools are acceptable. These need to be noted and fully justified in the submission.

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

NOTE: Tutor support for coding finishes at the end of semester.

### Assignment Assessment Criteria (also see Canvas)

Criteria	Needs Improvement	Good	Very Good
<b>Complexity of Project (5 pts)</b> Depending on the data set and context, different projects will differ in their complexity. This criteria recognises that more effort is required for more complex data sets.	Very simple data set used and/or limited number of variables.	Rich data set used. User is able to interact with one or more variables to explore data set.	Multiple data sets used, data sets from different sources combined in new ways.  Some variables be derived or specially calculated for use in the visualisation.
<b>Implementation 1 (10 pts)</b> This criteria assesses the degree to which you were successful in building an interactive data visualisation.	One or more of the following: <ul style="list-style-type: none"> <li>- no website built</li> <li>- no data visualisation evident</li> <li>- no interactivity</li> <li>- website barely functional (i.e., data not displaying properly or interactivity not working as expected)</li> <li>- interactivity managed by changing web pages rather than in programming of visualisation.</li> </ul>	Website built and accessible on Mercury. Demonstrates some of the following as appropriate for context: <ul style="list-style-type: none"> <li>- scalable labeled axis,</li> <li>- data import</li> <li>- transitions</li> </ul> May have minor issues in functionality Demonstrates one or more of the following interactive features: zoom, filter, brushing, details on demand. Code is well formed and commented. Code from external sources is acknowledged and referenced. Visualisation is presented with supporting context (i.e., page heading, explanatory text etc).	As per Good, plus Interactivity works as expected. User is able to interact with one or more variables to explore data set. Shows a good response to original data visualisation questions. Very good supporting context. Largely programmed using D3.

<b>Implementation 2 (5 pts)</b> Aesthetic design.	The website has two or more of the following: <ul style="list-style-type: none"> <li>- inconsistent or inappropriate fonts</li> <li>- text is not readable</li> <li>- poor colour choice</li> <li>- elements misaligned or poorly placed</li> <li>- no titles or legends to help user understand the visualisation</li> </ul>	Good visual aesthetic: <ul style="list-style-type: none"> <li>- colours used on page and in visualisation are selected with care (e.g., web safe, good contrast where required, harmonious, suitable for audience and purpose)</li> <li>- good font choices (e.g., headings are clearly defined, text is easy to read)</li> <li>- text and interface elements appropriately aligned</li> <li>- titles and legends used to inform the user about the data being viewed</li> </ul>	Excellent visual aesthetic. <ul style="list-style-type: none"> <li>- demonstrates excellent understanding and application of design principles</li> <li>- website incorporates elements of 'story telling' and provides the user with appropriate context to understand and explore the visualisation.</li> <li>- titles and legends used to inform the user about the data being viewed and are easy to read and understand</li> </ul>
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**Note 1:** Do not share references, code, resources or text with other students. Protect your work with adequate computer security. **If you provide work to another student you will be penalised the same as a student who uses your work. You are not being a good friend if you share your work with others. Both of you will FAIL and get an official penalty notice and face possible exclusion from the University.**