**Visualisation Project**

40%, 1,000 word report + 30-50 hr equiv. project

**Due Fri 13th Aug, 2021 @ 12PM**

You will produce a final project that will demonstrate your knowledge and skills developed through the term. This can be a poster sized presentation, a video graphic animation, an interactive dashboard, etc. The student will defend their choices and explain their visualisation in an accompanying 1,000 word report.

There are two components 1) visualization project and 2) report on the design process.

**1. Visualization Project**

You have a great degree of autonomy over the scope of this project. You will start by considering your interests, skills, and the kind of things you might want to learn or demonstrate to employers after the project is complete (i.e. if you are going into finance, you might consider a financial dashboard and it will be filled with time series; if you are interested in logistics and operations, you may consider a mapping and spatial project that shows linkages and movement of resources).

You will find your own data somewhere. This data must be publicly available, or you must have permission to share it. There are many great sources of data (e.g. the UK Data Servivce, Kaggle, Tidy Tuesday, Harvard Dataverse, and a bajillion other sources). You can scrape your own data as well, but I recommend using existing data and focusing your time on designing your final project.

**2. Report on Design Process**

The intent on this report is to document the design process. It is recommended that you save any materials you have as you work on your project. Save your initial sketches. Save your first drafts separately. These will help you when you are attempting to write up and reflect on your design decisions.

Explain the domain situation and the tasks you think your users will be wanting to perform when they use your project. Provide and explanation of how your design choices help to provide for the needs of these users. Explain you design choices in terms of the relevant threats to validity at each level. Explain how you would evaluate your project and determine if it functions as it should.

**Evaluation**

The criteria for evaluating your work is based on the [Generic NQF Level 7 Assessment Criteria](https://as.exeter.ac.uk/academic-policy-standards/tqa-manual/lts/genericassessment/#seven). Compared to the critique assessment there is more emphases on demonstrating learned skills and less on research. For distinction the following are specifically considered. The weights of each criteria are provided as a percentage (%) of the final score:

Knowledge & understanding of subject (30%)

* The discussion shows mastery of visualization concepts and theories and provides sound arguments for the design choices.
* The domain and tasks of this project are well-defined and the design choices for data / task abstraction and idiom / algorithm are appropriate and well-argued.
* The idioms match the tasks and design choices are considered in detail throughout.

Cognitive / intellectual skills (30%)

* The work demonstrates creative use of visualization techniques in order to solve the problem or suit the task.
* Difficult design challengers are met with innovation and informed by existing literature.
* The work demonstrates consideration of multiple options and a sound judgement in selection of a final choice.
* The design process and decisions are described in detail and demonstrate skill and attention.

Research Skills (10%)

* The work shows a selection of research-informed literature and / or published examples to draw from when making design decisions.

Skills for life and professional employment (30%)

* Students shows a high degree of skill using the chosen tools.
* Demonstrates very high level communication skills in a range of complex contexts, and ability to write at publishable standard
* Demonstrates autonomy and notable originality in tackling and solving demanding problems
* Shows a high level of consistency and autonomy in planning and implementing tasks at a professional or equivalent level
* Demonstrates the skills and attitudes needed to advance own knowledge and understanding, and to develop new skills to a high level
* Demonstrates the independent learning ability required for continuing professional development