

Information Visualisation Assignment: *Visualisation Experiments*

Description

The way that we design effective information visualisations is informed by evaluation experiments performed to understand how we perceive and interpret different visual encodings and visualisation types. In this assignment you must design an **evaluation experiment** to answer a key question about effective information visualisation design. The design of your experiment should cover the following issues:

- **Proposed hypothesis:** The question you will answer in your experiment, why it is important and what previous, relevant work exists
- **Measured variables:** The dependent and independent variables measured in the experiment.
- **Experimental methods:** Will the experiment be run using a within-group or between-group method?
- **Selected subjects:** Who will take part in the experiment?
- **Data collection:** What data will you collect?
- **Data analysis:** What data analysis techniques will you use?
- **Practical setup:** How will you run the experiment?

Your design should also **include a set of sample visualisations** that could be used in the evaluation experiment you will perform. These sample visualisations can be generated using any tool of your choice and should cover as many of the experimental conditions in your design as possible.

Submission

The key submission details for the assignment are as follows:

- **Submission date:** Friday 13th November 2016 before 23:59
- **Submission method:** Submissions should be made through the module Moodle site
- **Submission format:** Submissions should include
 - A pdf document based on the template provided (example visualisations can be added in extra pages)
- **Late submissions:** Late submissions will be penalised at 5% per day.

Marking

This assignment can be completed by students on their own, or in a group of no more than two.

Marking will be based on the following

- 30% Proposed hypothesis
- 40% Experimental method
- 30% Sample visualisations