

Interactive Data Visualisation

SEMESTER 1 2018

INSTRUCTOR: Dr Ruairí O'Reilly, Dr David Stynes

ruairi.oreilly@cit.ie

Assignment Brief

Following on from last week you should have setup your local webserver and be able to view the visualisations presented in class via your web browser.

Getting started with D3

Having completed the tutorials from last week it is time to put them into practice. We will start with the integration of different datasets with bar charts.

“What types of data can be displayed using a bar chart? Bar charts are useful for displaying data that are classified into nominal or ordinal categories. Nominal data are categorised according to descriptive or qualitative information such as county of birth, or subject studied at university. Ordinal data are similar but the different categories can also be ranked, for example in a survey people may be asked to say whether they thought something was very poor, poor, fair, good or very good.

With nominal data, arranging the categories so that the bars grade sequentially from the largest category to the smallest category helps the reader to interpret the data. However, this is not appropriate for ordinal data because the categories already have an obvious sequence. Bar charts are also useful for displaying data that include categories with negative values, because it is possible to position the bars below and above the x-axis.” [1]

So for this weeks lab you are going to apply what you have learned over the last couple of weeks and improve your data wrangling skills. You will be working with the following [dataset](#) which details the “Enrollment Numbers per school for the academic year

2009/2010 Contains information regarding numbers per school". Export the dataset to a CSV file and save it on your local machine under "htdocs" (the folder publicly accessible to your webserver). You are to create a number of visualisations for this dataset, including but not limited to:

- Visualise the total number of students in *Primary and Secondary* education
- Visualise the total number of female students in *Primary and Secondary* education
- Visualise the total number of male students in *Primary and Secondary* education

ToDo:

- Add grid lines to assist in comparing values

Tutorials from last week

i) [Let's Make a Bar Chart](#)

ii) [Three Little Circles](#)

iii) [How Selections Work](#)

Completion date

Submission date is based on your lab group:

SDH3-A (Ruairi's group) - Wednesday the 10rd of Oct at 23:59

SDH3-B, CO.WEB4 (David's group) - Tuesday the 9th of Oct at 23:59