# GGR472 LAB 3: Adding styling and interactivity to web maps with JavaScript (6.25%)

## Lab objective

During weeks 6 and 8, you learnt to use expressions and event handlers within JavaScript to filter data and respond to events in both the map and HTML elements.

The aim of the lab is to advance your proficiency in JavaScript by incorporating data-driven styling and interactivity into a web map.

The lab is worth 6.25% of your final grade, however, keep in mind that the primary purpose of the labs is to develop knowledge and skills which may be applied in your group project. You may use the exercises covered in class as guidance.

**Due Tuesday 5 March, 5pm**

# Create a web map

Create a new web map which includes the following (as a minimum):

* A layer with data/symbology that has been classified in some way
* Pop-up windows that appear on a mouse click or hover
* A method that changes the visualization of a layer based on an event
  + (e.g., use an expression to change symbol based on zoom level change or update paint/layout properties based on mouse event in map or on HTML elements)
* Map controls and HTML elements
  + (e.g., a button that initiates an action in the map)

The layer(s) in your web map may be added from any source (e.g., GeoJSON or vector tileset) and you are welcome to use data layers that you have created for previous labs or the group project.

As with each lab, consider ways to make your web map product more sophisticated. Grades will be awarded based on creativity and complexity.

There will be no written report, however, coherent commentary that demonstrates your understanding of the code is expected.

Once complete, upload your files to an online GitHub repository and deploy your website using GitHub pages.

**Submit a link to your GitHub repository AND a link to your website via Quercus**