## **CS 621 Spatial Databases**

**Dr. Peter Mooney** 



## Workshop Session – 12<sup>th</sup> November 2015

## Assignment

Create a web-based mapping application using JQuery, Bootstrap and Leaflet which has the following features:

- (A) Three base-layers which are compatible with Leaflet. The user should be able to switch between the base-layer maps depending on their choice. You should chose the base-layers carefully so that they allow any overlay data to be clearly seen and understood.
- (B) Three overlay GeoJSON layers which include the following type specifically
  - 1. A geojson layer containing NODES only
  - 2. A geojson layer containing POLYGONS (and optionally NODES)
  - 3. A geojson layer which you created yourself using the GeoJSON.io the polygon objects in this geojson layer MUST have at least two properties which are then displayed in any popup information.
- (C) When the web page loads up initially it should be centered and zoomed appropriately.
- (D) Your code is sufficiently well commented so you can explain where the layer choices, zoom setting etc are being declared and set.
- (E) You should only create ONE page which will include all of the requirements above.

You can use the examples from the Workshop to create your answer.

To submit your assignment you should make a ZIP file of the folder that you have the web-based mapping application stored in. There is no need to provide the Mongoose server with this ZIP file. You are encouraged to create a new folder for this work.

Within this ZIP file you should also include any GeoJSON layer files you used. You should also include a full-screen screenshot of the web-based mapping application running in your browser. You can use the GeoJSON files provided or you can create your own from using Overpass or GeoJSON.io.

Your web-based mapping application MUST RUN CORRECTLY when it is loaded on my computer for grading and assessment. I shall be using the Google Chrome and Mozilla Firefox browsers to test and run your code.

<u>DEADLINE – Thursday November 26<sup>th</sup> 2015 at 17:00</u> All submissions to be uploaded using Moodle (submission upload will be provided later)