**CS 6314 – Assignment 3**

**Due Date:** October 31, 2021

1. Make an AJAX request to FDSN (International Federation of Digital Seismograph Networks) Web Service and retrieve earthquake data for first half of this month and for earthquakes with minimum magnitude of 5.

Start time: 10-01-2021

End time: 10-15-2021

Min magnitude: 5

<https://earthquake.usgs.gov/fdsnws/event/1/query?format=xml&starttime=2021-10-01&endtime=2021-10-15&minmagnitude=5>

<https://earthquake.usgs.gov/fdsnws/event/1/query?format=geojson&starttime=2021-10-01&endtime=2021-10-15&minmagnitude=5>

API documentation for FDSN web service can be found at <https://earthquake.usgs.gov/fdsnws/event/1/>

Example request can be found under *query* title on API documentation page.

You can set the response to be in XML or JSON form.

2. Once the data is retrieved, show the results on Google Maps by using Google Maps API. Initial map will show all earthquakes.

3. Allow user to search for a place name (city or country) and show the earthquakes for that place only. (hint: use “*place*” attribute for filtering)

4. Replace default markers with customized markers using circles. The circle size will increase with the magnitude of an earthquake at that particular location. (optional, bonus 5 points)

See example code below to implement customized markers.

<https://developers.google.com/maps/documentation/javascript/earthquakes#using_shapes_and_heatmaps_to_customize_maps>

**Deliverables:**

Screenshots for all results and search results

Source files

Zip into HW3-netid.zip.