CSC443 Lab 8

## Using google maps and HTML5 geolocation (API Reading Heavy)

This application has a purpose of showing google map on the screen. In addition, we will learn how to manipulate google maps to our advantage. To be able to use google maps in our Front-end, we need to sign up as google developers using google cloud platform (https://console.cloud.google.com/). After Signing up, we need to create a new project and enable the use of some google map APIs to be used. Enable the following APIs: Maps Javascript API, Geolocation API. After enabling these two API, get the API Key and save it to use it later and access Google Maps.

(https://support.google.com/googleapi/answer/6158841?hl=enifyou have trouble getting the key refer to this on how to do it)

- 1. The purpose of this exercise is to create a client page with a google maps. A useful link to import the map (https://developers.google.com/maps/documentation/javascript/tutorial). Don't worry if the map looks darker, it's because we need a billing address to use a map with a lighter tone. Focus on what scripts to add for you to be able to call a map, and how can you actually add a map to an html element.
- 2. After adding the map, we need to allow the user re-center the map on a given location. To do this add 2 textboxes that represent the latitude and longitude, and a button to send these data to the map. The map will then use these Lat and Long data to add a marker on the given location. To do this, check the adding a map with marker section of the documentation given above. Also, re render the map completely (create a new map) that is centered around this location with a marker on it and show it instead of the previous map.
- 3. Add a button that does the same thing above but uses your current location. Useful resource to get your geolocation in html5: https://www.w3schools.com/html/html5\_geolocation.asp