Project Ideation Report

1) **Introduction**
    a. My application will use a web-based GIS interface to allow users to map locations of interest based on category, and query nearby locations of interest that other users have submitted. The goal of the application will be to build a large database of locations and information for general use.
    b. This information could potentially be valuable to any user who wants to analyze spatial information for any purpose, or to simply have fun with seeing what other people have around them.
2) **Expected List of Features**
    a. My application will use the GeoJSON spatial information format to store shape and attribute information in a Bluemix server back-end. It will support adding, querying, and updating point locations and the associated attribute information (line and polygon data could get a little tricky, but if possible, I will add those features). I will be using the ArcGIS JS API for development.
    b. GeoJSON is the best format for storing spatial data because it can be interpreted by a wide variety of APIs. I chose the ArcGIS JS API because it has a ready-built set of directives and services for use in Angular (angular-esri-map).
3) **Market Survey**
    a. List of applications/websites with similar ideas:
        i. Waze: A very popular navigation app that allows users stream real-time traffic data and mark accidents and other road hazards.
        ii. Map My Walk: A fitness app that allows users to map their walk (as the name implies) and share this information with other users.
        iii. New Jersey Pothole Map: A website that allows users to submit pothole locations.
        iv. Instagram/Flikr: Both of these apps allow users to georeferenced their pictures.
    b. My application will have some similarities to these applications, but it will be much simpler and more generalized.
4) **References**
    a. Relevant websites for my application:
        i. angular-esri-map: https://esri.github.io/angular-esri-map
        ii. Terraformer: http://terraformer.io
        iii. GeoJSON: http://geojson.org
        iv. ArcGIS JS API: https://developers.arcgis.com/javascript
    b. Similar applications/websites:
        i. Waze: https://www.waze.com
        ii. Map My Walk: http://www.mapmywalk.com
        iii. NJ Pothole Map: http://mappler.net/njpothole
        iv. Instagram: https://www.instagram.com
        v. Flikr: https://www.flickr.com