**Your name, course number (458 or 558), and project title**

Tressa Hobbs, LA 458, Crime Distribution in Baltimore, Maryland

**Brief elevator speech about your project (2 -3  sentences)  -- [3 pts]**

For my final project I am going to create a web map displaying the distribution of crime in Baltimore, Maryland. This map will utilize a heat map or cluster map crime layer, a polygon layer of Baltimore neighborhoods, and a point layer of the Johns Hopkins University campus and related buildings.

**An expanded abstract about your project (1 - 3 paragraphs, - no more than 1/2 page) -- [5 pts]**

For my final project I am going to create a webpage and a web map displaying the distribution of crimes in Baltimore, Maryland. The web map will consist of multiple base map layers, a point layer showing the locations of the two Johns Hopkins University campuses, a polygon layer showing the areas and locations of different Baltimore neighborhoods, and a cluster map of the crimes starting at the neighborhood level and zooming into the individual locations of each crime. Each neighborhood will have a popup stating the number of crimes that have occurred within it. In addition to this the web map will have layer control and possibly a color-coded legend of each type of crime.

**Listing of all the technology you will use and how they will be used- i.e. Leafet, Carto, MapBox, GitHub, GeoJSON.io, etc.  -- [5 pts]**

I will be using leaflet to display my map, GeoJSON layers for my backgrounds and for my created point layer for the locations of the Johns Hopkins University campuses in Baltimore, Maryland. I will also use leaflet plugins to display my .csv and .shp files. I will also be using MapBox for my custom token for my leaflet base map. I will host my final web map and web page using GitHub.

**listing of all the data sources you will use (including links if getting it from the internet) and the format this data comes in (shp, geojson, online api, etc.). Will data be created or converted? if so, from what to what, using what tools?  -- [5 pts]**

<https://data.baltimorecity.gov/Crime/Baltimore/55sz-nsjp> this data comes in a .csv format. I will use a leaflet plugin to display the data in my map as a cluster map.

<https://data.imap.maryland.gov/datasets/fc5d183b20a145009eae8f8b171eeb0d_0?geometry=-77.491%2C39.055%2C-75.847%2C39.427> this data comes in .shp format and I will be using a leaflet plugin to display this data on my map.

The locations for the Homewood campus and the East Baltimore campus will be optained from the Johns Hopkins University website.

**Identify the challenges that you see as well as items you think you will need some assistance with.  – [2 pts]**

The biggest challenge I see is making sure the crime dataset is exactly what I need and how I’ll have to parse it to create a dataset that can be displayed as a point layer in my web map. If I have to parse the data set, I might need some assistance with that process since the dataset is so large.

**Links to similar features**

<https://www.crimemapping.com/map> (content)

<https://mangomap.com/mango-chris/maps/18637/city-of-spokane-crime-cluster-map#> (cluster map, content, mapping interactivity, design)

<https://www.moma.org/interactives/exhibitions/2013/designandviolence/new-york-city-crime-map-new-york-city-department-of-information-technology-and-telecommunications/> (design, content)