Jay Desmarais CMSC 320 Project 4: Maps

In [ ]:
```
# Import necessary libraries.
import folium
import json
import pandas
```

Part 1: Getting Some Data

In [ ]:
```
# Fetch the data from the source link.
road_closures = pandas.read_csv("https://opendata.maryland.gov/resource/nigh

# This code block fetches and displays the dataset from opendata maryland th
```

Part 2: Making a Map

In [ ]:
```
# Create a map and center it on Washington D.C so the state of Maryland show
map_osm = folium.Map(location=[38.9, -77.04], zoom_start=9)
```

Part 3: Combining Parts 1 and 2

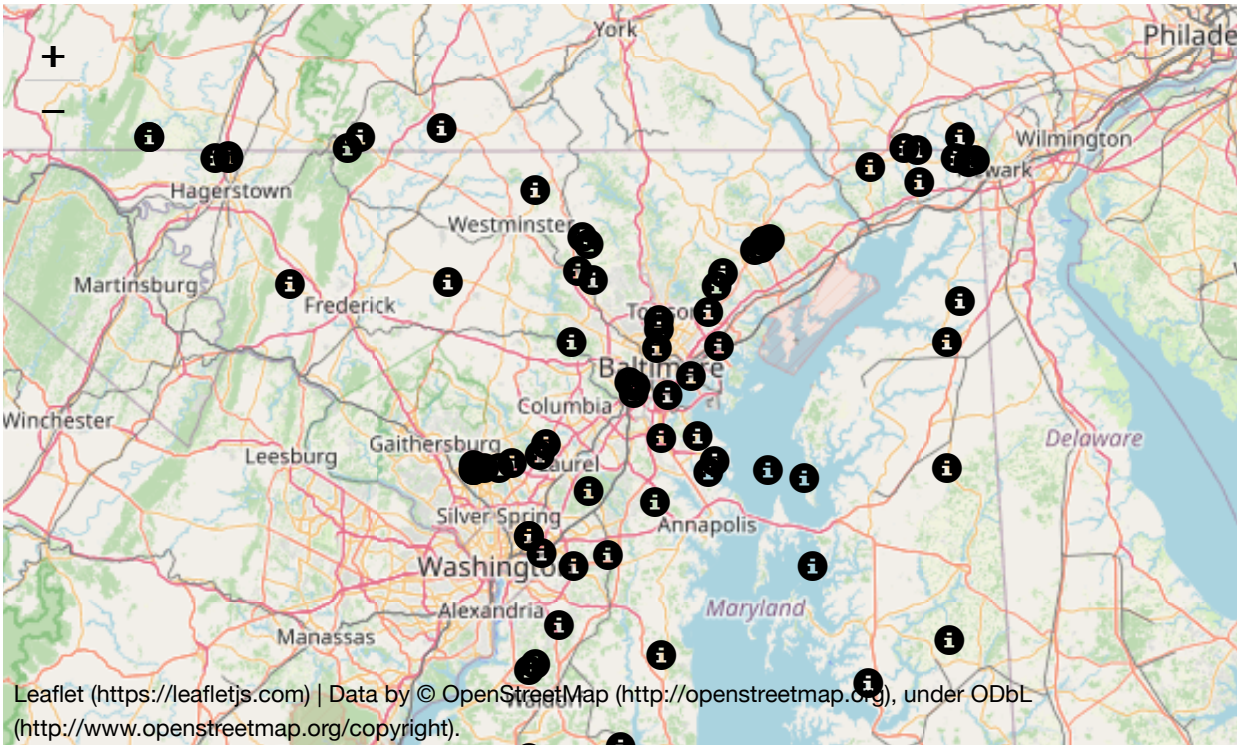
In [ ]:
```
# Visit every row of the road closure data set.
for index, closure in road_closures.iterrows():
    # Collect the latitude and longitude from the row.
    coords = json.loads(closure["long"])

    # Plot all northbound road closures on the map in their respective color
    if closure["direction"] == "North":
        folium.Marker(location=[coords["y"], coords["x"]],
                      icon=folium.Icon(color='red')).add_to(map_osm)
    # Plot all southbound road closures on the map in their respective color
    if closure["direction"] == 'South':
        folium.Marker(location=[coords["y"], coords["x"]],
            icon=folium.Icon(color='blue')).add_to(map_osm)
    # Plot all westbound road closures on the map in their respective color
    if closure["direction"] == 'West':
        folium.Marker(location=[coords["y"], coords["x"]],
            icon=folium.Icon(color='black')).add_to(map_osm)
    # Plot all eastbound road closures on the map in their respective color
    if closure["direction"] == 'East':
        folium.Marker(location=[coords["y"], coords["x"]],
            icon=folium.Icon(color='green')).add_to(map_osm)

# Show the map with all of it's plots.
map_osm

# This code seperates out and plots all road closures based on the direction
```

Out[ ]: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