Diane, Gabriel, and Roger will create a github page to deploy an application that allows users to search the U.S. News and World Report ranked universities for 12 different graduate programs. These will be displayed on a map using Leaflet.

The data sets are:

1. The postsecondary schools geoJSON file and CSV file from: <https://catalog.data.gov/dataset/postsecondary-school-location-2016-17>
2. The school rankings from :

<https://www.usnews.com/best-graduate-schools>

and specifics by graduate program:

<https://www.usnews.com/best-graduate-schools/top-law-schools/law-rankings>

for law, for example.

To get the data from U.S. News and World Report’s website, we’re using python, pandas, beautiful soup, and selenium to scrape their website because they don’t have API’s available to access their data. To join the two datasets to eliminate universities that have no ranked graduated programs, we will use PostgreSQL.

Here is the link to the repository: <https://github.com/dianess/Brute-Force-Grad-College-Rankings-Map.git>

Here are the screenshots that inspired our design:

A picture containing text, map

Description automatically generated

Figure 1: Screenshot of the New York City Bikes activity from lesson 17

A picture containing text, map

Description automatically generated

Figure 2: Screenshot of Marker Clusters from lesson 17.

**Screenshots of our final design with a small test data set:**

The final product will provide two different interactive maps:

The first map (Figure 3) contains different layers for each graduate program. Using the control button in the upper right corner of the map, the user can choose which graduate program they want to focus on, for example: business, law, engineering, etc. The map will have markers for each university that has a ranked program. When the user clicks on a particular university, a pop-up will display information.

A close up of a map

Description automatically generated

Figure 3: Screenshot of the interactive map that displays the universities based on the graduate program selected by the user from the control button.

The second map (Figure 4) shows circles with a number on them and/or markers. When the user clicks on a circle, one of two things will happen. If there’s more than one university in the region, separate circles will become visible for each university. Once the user clicks on the level of a specific university, markers will pop up, one for each ranked graduate program. When the user clicks on a marker, it will show the name of the university, the graduate program that’s ranked and the university’s rank number in that program.

A close up of a map

Description automatically generated

Figure 4: Screenshot of the interactive map that displays each ranked program for each university.