**Distance and Directions with Google Maps**

User Manual

**Slippery Rock University**

Greg Bayne

Kari Franklin

Michael Booser

Before using this manual, follow the configuration manual. For instructions on how to install and run the program see the Configuration/Installation Manual.

1. running from Eclipse, go to web browser and search “localhost:8080”.

Graphical user interface, application, chat or text message

Description automatically generated

1. From the homepage, you can view queries already stored in the database.

Graphical user interface, text, application

Description automatically generated

**Page 1: Distance and Directions (Point-to-Point)**

**Entering New Queries**

1. Select “New Query” at the top of the page, under the prompt.
2. This brings you to a new page with two (2) address fields. *Address 1* and *Address 2* refer to a *beginning location* and *ending location* respectively.

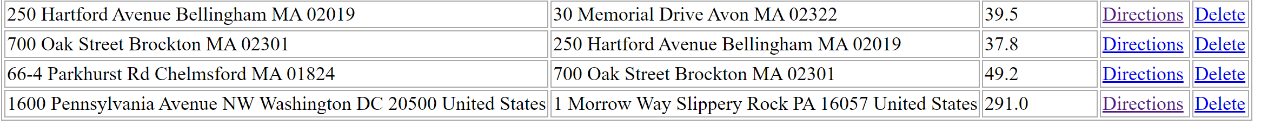
Graphical user interface, application

Description automatically generated

1. Fill out both fields as accurately as possible. Inaccurate spelling or an invalid address(es) may return unpredictable results.

Graphical user interface, application

Description automatically generated

1. Click “Submit”. You will be directed to the homepage with your new query at the bottom of the list.
2. If user decides they do not want to continue with a query, they can select “Existing Queries” at the top of the page to return to the home page.

**Finding Distance Between Locations**

1. The distance (in miles) is automatically shown on the home page, to the right of the addresses of each query.

**Finding Directions from Origin to Destination**

1. To the right of the distance entry, user may click on the “Directions” hyperlink to open a new page.

Table

Description automatically generated

Text

Description automatically generated

1. This page will have the Instructions for the desired query. When finished, user can select “Existing Queries” button at the top of the page to return to the home page.

**Displaying Route Map**

1. On the main page, press the ‘Display’ button next to an existing query, and the map below will automatically populate with a street-by-street line guide of the directions.

Table

Description automatically generated

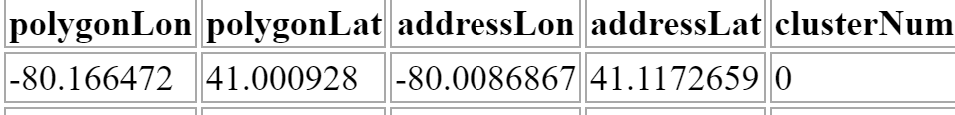
**Deleting a Query**

1. Should user desire to delete a query, they may select “Delete” in the far right hyperlink inline with the query to be deleted. This deletion is permanent.

**Page 2: Area Polygons and Clustering**

**Uploading .csv Files**

1. Files should be uploaded with a .csv extension. The column labels and data should align with that below:



Click the ‘Choose File’ button, then navigate to the desired file and click “open”

Graphical user interface, text, application, email

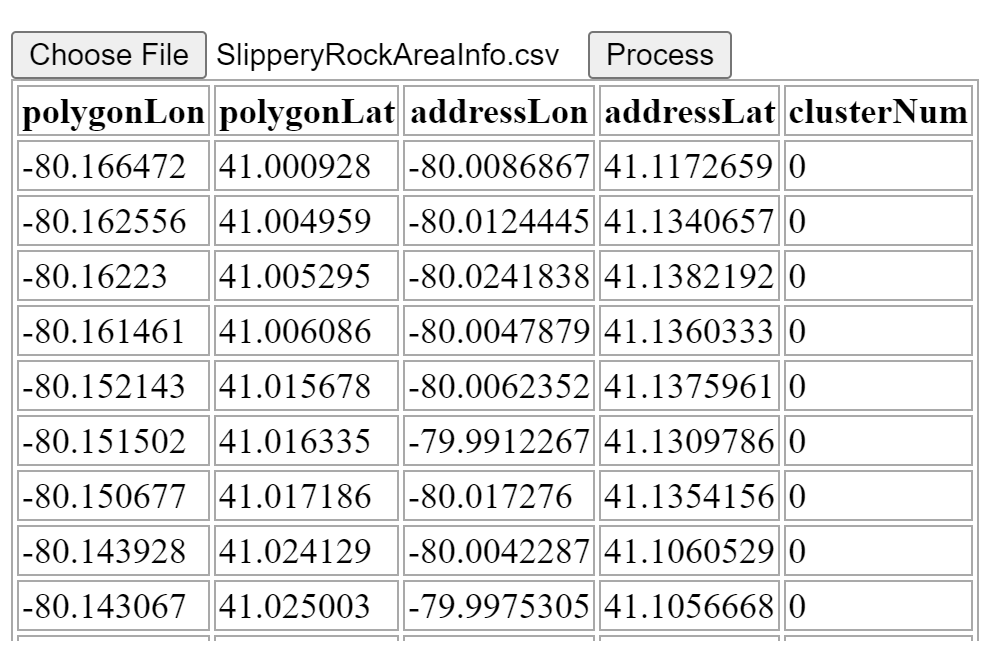
Description automatically generated Graphical user interface

Description automatically generated

1. After uploaded you will notice the filename is listed. Click “Process” to load the file data into a table on the web page.

Text

Description automatically generated



**Processing Data on Map**

1. Once the desired file is uploaded, You may click “Show Area Polygon” to load the data onto the map. The map will recenter based on where the polygon lies. Any marker values will also load with an icon according to the assigned cluster.

Map

Description automatically generated

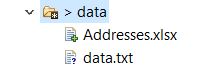
1. You may toggle the marker visibility by selecting “Toggle Markers”, which will allow user to see the area polygon by itself. Selecting the button again will repopulate the map.

Map

Description automatically generated

**Data Storage and Persistence**

1. The data for this project is stored locally in a file called data.txt. Which is saved to the programs working directory.



1. The file is not human readable text but is interpreted by the dataController class to load and save google API queries. Thus, reducing unnecessary calls.