ECE Senior Design Weekly Report

Engineer’s Name: Mark Luna Date: 2/23/17

Team Name: The Globetrotters Lab Section: 4, Thursday 12:30 PM

Week’s Task: Learn the basics of Python scripting language, and research and test GUI and core components from the QGIS API applicable to the project with a sample map generated by another team member.

Results:

* Further research into generating a GUI using the web app builder plugin discussed during the previous week and attempts to installing it with my QGIS installation resulted in finding out that that specific plugin is provided by a different company and requires a monthly paid subscription to use as part of a software bundle, therefore the plugin will not be used and a GUI will have to be implemented with code through the QGIS API.
* With a sample map and a corresponding .csv file containing over 200 capitals and simple information such as country, population, latitude, and longitude, I have successfully written a script that can be executed within the QGIS Desktop Python command line that will open the .csv file, search for a specified city in the table and retrieve any of the corresponding data from that row, and center the map around that city based on its latitude and longitude. The complexity of performing these actions for different types of data will vary based on the final table specification.
* Importing the core and GUI components of QGIS into a Python script external to the QGIS Desktop application is proving to be problematic due to an error for which I have not been able to find a solution, therefore at the moment all the scripts must be run within the QGIS Desktop application.