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MIS3615

19 April 2020

### Final Project Reflection

The project used 2 APIs in conjunction with each other to ultimately provide the nearest MBTA transit stop based on a given location input. The first API was MapQuest's Geolocation data. The goal is for this API to take a user input of a location or address and yielded all sorts of location information. From there I parsed out the Latitude/Longitude output of this API and used it as an input of the second API which was "MBTA-realtime". There was flexibility in what the cutoff was to determine what qualified as "nearby". I decided to use a long/lat degree value to set the cutoff value of .02 (which roughly translates into around a half mile). Then the second part of the project was to develop a simple web app using flask that contained the module from part 1.

One of the first things that comes to mind that I could improve on is my method of filtering the results. I knew I wanted to keep the results focused on Massachusetts, so I added a parameter that automatically added ", MA" to the end of the user's input. This is not the most ideal scenario but is something I can work on going forward. I also had to do a lot of self-studying, in terms of reading documentations on how certain APIs behaved. I spent a lot of time reading up on specific actions you can use with these APIs, which was good information, but next time to stay more focused on the goal of the project, I might not spend as much time going through every single action. Overall, the process of pulling information from APIs is relatively simple, and I appreciate the process. The most difficult for me was to "connect" HTML, flask, and python all together. I had to do a ton of outside research and an extensive amount of trial and error.

I will definitely incorporate my knowledge of APIs going forward. In the immediate future, I am currently working on a personal project. I am interested in scripting trading bots and automatically trade US securities in the stock market. To train the machine learning techniques and perform back testing I will be using various finance APIs. Also, I will need real time current data to help predict future stock prices and execute a buy or sell order. Understanding the general workflow of this project will help me tackle my next project. I also liked that I was able to get experience with combining multiple functions into each other, as this will be necessary for this next project.