Project Writeup and Reflection

Project Overview

The objective for this project is to provide the nearest MBTA station and its distance from the location that users type in. The main file "mbta_helper.py" imports three modules: urllib.request, json, pprint. These modules are used to decode the information retrieved from API to a readable solution. Our team created four functions that:

1. Returns a python JSON from a properly formatted URL for a JSON web API request.
2. Returns a (latitude, longitude) from Google MAP API.
3. Returns the nearest station and its distance from "place name" based on (latitude, longitude). We used MBTA_DEMO_API for this function.
4. The final function that recalls three functions above to return the combined result.

"Hello.py", a file that builds a simple website through Flask module, was created to offer uses a more user-friendly access to "mbta_helper.py" in web-based page.

Project Reflection

As none of our team members were familiar with the concept around API, the team had hard time form the code in the beginning. However, we mapped out the necessary process for this project in a professional manner, and were able to make the function work successfully.

We, as a team, did the most of part together. We did have our own strength on different areas. One of us focused more on coding of the function that we will use in the web site. The other one focused more on designing the web site and implement coding into the web. There were small issue when we were using the GitHub. We didn't know how the synchronize process works, which led to the case where we overwrote on each other's work. The major take away from GitHub is that it is more efficient for each team member to divide the section to work on. By doing so, we were able to maximize each member's strength and minimize the risk of overwriting and

time it takes to finish the work. Overall, it was really interesting to see how each of the function that we create is combined to extract the ‘insight’ from ‘mass of data’.