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Project Overview and Reflection

Project Overview

MBTA Helper is a web application development project and a problem-solving tool that requires me to apply the knowledge in Python from current Software Design class and HTML from Web Technology class. This project enables users to find the closest MBTA (Massachusetts Bay Transportation Authority) stop information and whether the stop is wheelchair accessible, by simply providing address or place name. In particular, to make *MBTA Helper* work, I used the MBTA API and the MapQuest API to access the stops' names, wheelchair accessibility, and stops' latitude and longitude. Additionally, the HTML allows the web page to render templates and display inputs and outputs to users.

Project Reflection

For project implementation, I split the *MBTA Helper* project into 2 parts: (1) APIs and Python functions; (2) HTML website design. After I implemented APIs, wrote required Python functions, and finished web design, I combined them in a Python file, called `app.py`.

The process of writing Python functions made me feel accomplished and frustrated at the same time. It took me a long period of time to finish. The project instructions file provided me a clear guidance to begin with. I read the instructions a couple of times throughout the project-making process to understand the basic structures and relationships between *Part 1 Geocoding and Web APIs* and *Part 2 Web App*. Later, I checked the instructions again to see if I had missed anything. In addition, there were cheerful moments when I made each small part work. I got a taste of a programmer's everyday intense working life. Lastly, this project let me realize how important it is to pay great attention to details because each step matters. Overall, with the help from Professor Li, I was able to do most part of the project, but my codes still had issues. And there is a long way to go for me to practice problem-solving and debugging skills.