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Professor Li
MIS3640: Problem Solving with Software Design
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Assignment 3 Written Report:
Creating an App to Find the Nearest MBTA Station

Project Overview:
The goal of the project is to help a user find the nearest MBTA stop to the location he or she inputs. We used flask within python, API keys provided from hosts, and html/web tech to create this website app and server.

We first retrieved the API keys from MapQuest and MBTA developer to create a python function to find the nearest MBTA station. Through python command executions, the data given was manipulated to locate the nearest station of a given location and see if it is wheelchair accessible. Afterward, the flask is imported and the command is run to create a server connected to python functions from *mbta_helper.py*. On the website, the homepage is presented along with a form in which the user can input the desired location; this is recognized from the *mbta_helper.py* function and the nearest station from MBTA helper and MapQuest is given and if it is wheelchair accessible.

Project Reflection:
From a process point of view, what went well was the flow of the given work. Due to circumstances, the team was unable to fully complete the assignment and develop the appropriate python coding in person together. However, thanks to Github, the team was able to update their codes with each other and work in real-time updates of the work. All the team members had the same level of experience for Part 1 of the assignment, and the team believes that the project was appropriately scoped because similar exercises were conducted and reviewed in previous class sessions, allowing the team to learn and apply to the project. However, other team members felt more comfortable with the flask portion of the assignment because they were more familiar with HTML and web tech; hence, those team members were able to leverage their knowledge into focusing on developing the web tech portion of the project. Going forward, the team will use the skill leveraging dynamic used in this assignment to the upcoming final project. Since our team has members that are more comfortable in other areas of the project; such as web technology development, our team will prioritize members who feel more comfortable in their respective areas.

The work was not split initially, as the team decided to progress as a unit and solve parts of the coding collaboratively. However, because not all the team members could meet together in person, the team agreed that it would be easier to split parts of the assignment and updating each other through Github. In the beginning, there were issues because team members were labeling and structuring the coding in different ways, but after getting used to committing and pushing documents in Github, the members were able to efficiently communicate with each other while spitting the work appropriately. In the future, the team believes it is a good idea to have meetings

in person to adequately brainstorm approaches to completing the project and splitting the work evenly and then working in their respective fields carefully.