

Project Writeup and Reflection by Huiye(Agnes) Xie, Huifang(Cathy) Ma, and Zhe(Michael) Wang.

Project Overview

- In this assignment, our goal is to create a tool that allows the user to input a Boston address and the tool would take the address name and return the closest MBTA stop in 5 miles. We prepare a `meta_helper` to gather information from MBTA, locate a place and get its latitude and longitude, and return the nearest MBTA stop and whether it is wheelchair accessible. We also use `*flask*` to design a web page that would ask the user to input a place name and display all the returned results. The website would display `*the nearest stop does not exist in 5 miles*` if there is no stop in 5 miles. The website would display an error page and a link that will redirect the user back to the home page.

Project Reflection

- During the process of completing this assignment, one of the biggest challenges we encountered was that we could not link the code in `mbta_helper.py`, which processes the information about the requesting place, to our designed `htmls`. It took us a while to figure out the potential causes and the corresponding solutions. Eventually, we found out the bug was due to the function name that we entered unmatched. Another one was that we tried to follow the given function names at first, but found out we could not go step by step as the given function name asked. So we changed some of the function names and designed them as our logics. Gladly they both functioned well. A last challenge was that we were able to use CSS functions like `background image` and `insert image` to make our web page more fun. However, we failed to make the image function as expected with Python. We did not want to waste too much time on this part, so instead, we used `“!”` to illustrate the error icon, and an emoji to respond to the user when they get to the results page. By manipulating the text color and font size, we decided the web pages were prettier and more fun than just simply display all the information.

- For higher working efficiency, we splitted the work by parts. While Michael was responsible for part one, Cathy and Agnes took charge of part two and focused on web designs. The whole process went well, since we were able to start early and kept communicating with each other on Wechat. We were able to encourage and help each other when facing difficulties, so we successfully completed the project quickly and efficiently.