METCS673 Group 6 - Project Status Report 3

TerrierMap

Team Members:

- Ryan Christopher
- Misael Gared
- Jasmine Hughes
- Siddhraj Parmar

TerrierMap GitHub Repo: https://github.com/ryan-christopher/CS673-TerrierMap

Meeting Decisions:

- We plan to start writing some basic tests to ensure the routing machine is properly displaying directions.
- We plan to update the Frontend to receive the user's location to render and display the user's longitude and latitude.
- We plan to begin implementing the process of receiving a building code and returning an address from our database.

Completed Tasks:

- Implemented functionality to update the map based on the user's location by pressing a button
- Converted database into a more readable/useable Firebase database

Assigned Tasks:

- Writing tests for the routing machine in Python | Jasmine Hughes
- Display user's location in longitude and latitude | Siddhraj Parmar
- Return address from database after building code is given | Misael Gared
- Acting as support for testing and backend work this week | Ryan Christopher

Individual Contributions:

Ryan Christopher: This week I assisted in starting the testing scripts we will use to validate that our routes are being properly generated using the requests and json python libraries. We initially used Postman to see how the leaflet routing machine returns information via json files and will continue to work on this. I also began to work on making calls to our Firebase database in order to get a street address from a given three letter building code.

Misael Gared: This week, I focused on exploring the Leaflet library to retrieve and render the longitude and latitude coordinates needed for pin placement on the map. I worked on ensuring that the map accurately displays these pins based on the provided data, and I looked into ways to optimize this rendering process for dynamic map interactions. Additionally, I researched methods to improve the map's responsiveness and ensure that the pins are displayed correctly across various user devices.

Jasmine Hughes: This week I didn't contribute anything meaningful nor did my assigned tasks. I converted our existing database into a Firebase database, so we can utilize the collections feature and have data with meaningful parameters. I could not for the life of me figure out how to set up a test server to convert routing directions into walking directions nor test whether the API is working properly on my machine despite Ryan's assistance. I was also able to find a document that might provide assistance in troubleshooting when calling data from the Firebase database.

Siddhraj Parmar: This week I implemented the feature that allows users to retrieve their current location directly on the map without needing to leave the application. I integrated the geolocation API to fetch users' coordinates and dynamically updated the map using the React Leaflet library to display a marker indicating their position. This feature was built using Next.js for the front-end framework and was optimized for responsive interaction across different devices. I also ensured that the map automatically adjusts its center based on the user's location and displays helpful markers for navigation purposes.