EE/CprE/SE 491 WEEKLY REPORT 3

3/5 – 3/24

Group number: 34

Project title: Semantic Visit Aware Recommendation of Hotels

Client &/Advisor: Goce Trajcevski

Team Members/Role:

Dylan Hampton – Frontend
Zachary Garwood – Backend
Thomas Frohwein - Frontend
Britney Yu — Backend
Joe Zuber – Backend
Nathan Schenck – Frontend
Kevin Knack – Backend

Weekly Summary

In the past two weeks, the front-end team has been working towards being ready to begin development on the route visualization. We have created tasks to be divided and assigned as soon as our current roadblocks are cleared. Lots of work has been completed, in the meantime, on the testing procedures that we will continue to use throughout development to improve the quality of our additions and revisions. On top of testing, we have also added things to prepare for the team's focus on route visualization like data models and controllers.

The past two weeks, the back-end team has been working on cleaning up our project structure and code as well as adding more tests. We created a back-end testing stage in our CI/CD, and created more test cases to verify routes generated and test invalid inputs. Additionally, we worked to restructure the files in the backend, and refactored parts of our code to make it more reusable.

Past week accomplishments

Zachary Garwood: Created a back-end testing stage in our CI/CD, and fixed a permission issue with our gitlab runner. Worked on adding more tests to the back-end which included testing the route generation for every algorithm as well as testing invalid inputs for our route generation endpoint.

Dylan Hampton: Spent a lot of time debugging, looking for the error which was causing the testing CI to not run tests properly. Originally thought it was caused by incorrect yaml or commands to run but was an issue with an infinite loop in the PoI dropdown component. Worked on creating more test cases to cover frontend, was able to get some done but having trouble with creating tests for the dropdown inputs.

Nathan Schenck: Worked towards functionality that will be fully completed when certain roadblocks are cleared. Added data models that correspond with the route data response from the backend. Added a new field for the maximum number of origins. Added a class to be used as a publisher/subscriber model for drawing map information.

Thomas Frohwein: Worked on packaging input for the backend to call the algorithm with a set of inputs and retrieve a generated route. Added redux to help store and access state from user input.

Britney Yu: Restructured the backend code to be easier to read with the modules and packages. Started to help with storing the latitude and longitude on the POIs.

Joe Zuber: Got to work at refactoring the backend code. Broke up some large functions into smaller functions. Attempted to make some functions city-independent.

Kevin Knack: Worked mostly on an issue with multiple nodes having the same latitude and longitude and different POIs. Looked into ways that backend can go about finding new city data.

Pending issues

- All meaningful Frontend work is blocked until the task regarding submitting input to the Backend for route computation is completed.

Individual contributions

NAME	Individual Contributions	Hours this week	Hours cumulative
Thomas Frohwein	Worked on packaging input for the backend to call the algorithm. Added redux to help store and access state from user input.	5	22
Nathan Schenck	Added field for number of maximum origins under the Advanced Setting tab. Created data models based on the API response. Added the MapController. Created Recommended Hotel list item component.	*6*	*36*
Dylan Hampton	Debugged front end testing CI, worked on creating more tests to increase front end component coverage	8	38
Zachary Garwood	Back-end testing stage CI/CD, added more test cases for route generation	*6*	*38*
Joe Zuber	Backend code refactoring, getting a better understanding of how things can be done in a city independent manner	6	24
Britney Yu	Reorganized the backend's flask files. Started to attempt to store data for the latitude and longitude for the POI.	3	21
Kevin Knack	Attempting to fix issue with nodes, looking into ways to retrieve city data	*3*	*20*

Plans for the upcoming week

Zachary Garwood: Work on testing helper functions that are used by our endpoints, and help with any restructuring and refactoring of the backend. Look into adding data for a new city after the previous work is completed.

Thomas Frohwein: Continue researching MapBox API and how we can potentially generate routes with information given by the user and with algorithms developed for us by the client. Finish implementing Redux into the codebase to be able to package inputs for the backend so we can get a generated route and begin to show it on the frontend.

Nathan Schenck: The frontend team has created tasks for immediate use for when we get unblocked. Next week we'll begin work on those tasks and begin the process of developing and debugging the route drawing process. We will assign ourselves tasks as we can to keep progress moving forward.

Dylan Hampton: After the front end roadblock has been cleared, I will help work on the new tasks created. I plan on working with the rest of the front end team to work towards having the generated routes implemented. The front end team will assign ourselves tasks to keep track of progress.

Joe Zuber: Get a better understanding of some sections of code, and add comments to make the code more legible. Continue refactoring where necessary. Look into how obtaining a graph might be done in a city-independent fashion (so that a city variable might be passed to the function instead of creating a function for each city). Potentially help out with the Node ID issue.

Britney Yu: My plans for the upcoming week is to continue working on helping the backend store data points for the hotels, latitude and longitude for the POIs.

Kevin Knack: Continue working on the issue with node ID's. Add more tests to the backend. Maybe start on adding new cities to the application if some other issues are resolved.

<u>Summary of weekly advisor meeting</u>

There was no meeting during our scheduled time this past week due to spring break.