

Software Engineering Final Project Report

Group 1: JACK's Travel

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Course: CYBR 404

Key Features:

JACK's Travel is a web application designed in a mobile-first fashion and with accessibility in mind. JACK's Travel allows users to break out of their routine and find new places to visit. Users can create a profile to favorite locations and save theme preferences.

Impact:

JACK's Travel aims to help people find new places to eat and hang out, and events going on in the community. By prioritizing accessibility, we ensure our application is inclusive and able to be used by as many people as possible from launch. An additional impact that was desired was to help new or local businesses that may be overlooked due to location or other circumstances.

Challenges and Lessons Learned:

The main challenge faced was team dynamics and completion of the project. Originally, the project was divided into four parts, one part for each member: Arianna on front end, Klayton on infrastructure, Colton on API & search, and Johnny on database. Due to delayed progress on the project, the division of tasks was reworked and Klayton took on additional backend and frontend work for the search functionality as well as the database and login functionality. Arianna added documentation and picked up this report and presentation.

An additional challenge faced was balancing the weekly work and the semester-long project work. The majority of the semester was focused on weekly work which was also done in a group format. Scheduling meeting times and completing weekly work was occasionally an issue and often done at the last minute which prohibited meaningful progress being made on the project.

Future Development:

Due to the challenges faced by our group, our project has many opportunities for future development and improvements. These include features we had hoped to implement before end of semester and features we knew would not be attainable. Features we had hoped to implement that would improve the project are a hot list and filtering for events. The hot list is intended to show trending and popular places to enable users to see what may be popular at the moment and also potentially find new places and events. The hot list could be based off user ratings from the application but could also be pulled from an API like Google. A large feature of our project that we intended to have was filtering a search to either food, events, places, or a combination of the three. This would allow users to search more intentionally and display only what they desired in both the search results and the hot list. This would likely be one of the first improvements made to the project after submission.

A feature we would have liked to have but realized early on would not be possible to implement during the semester was ratings. Because this was an early idea, not a lot of thought went into how exactly the rating system would work, but we considered a star rating on a scale of 1 to 5. Additionally, we wanted to have accompanying reviews that would allow the user to write more information about their rating. This could also be tracked on the user's profile page so they could go back and see what they thought of previous places. This would of course also help other users see what people recommend or don't recommend which would ideally improve their experience. By having ratings and reviews only from users of the application, users can trust these as they not filled with spam and bots like larger organizations like Google and Yelp are.

Although JACK's Travel was made with accessibility in mind and resources from WebAIM (Web Accessibility in Mind) and WAVE Chrome extension (Web Accessibility Evaluation Tool), there are other tools that can be used and users who could test the application for us. An additional feature that would increase the accessibility JACK's Travel would be to allow users to create their own theme rather than having to choose from a set of themes. This would allow users who perhaps have a specific type of color blindness to choose colors that are most easily viewed by them. It also adds a fun component to the app that is not often

found or fully implemented. Allowing users to create their own theme could be implemented easily and a second feature could be to allow them to import themes or change all features like the navigation bar, sidebar, and buttons.