

EE / CprE / SE 492 - Bi Weekly Report 03

Feb. 22 - Mar. 1, 2021

Group 34

Route-Constrained Family Shopping Optimization

Client: Iowa State University

Faculty Advisor: Goce Trajcevski

Project Contact: Ashfaq Khokhar

Team Members:

Colin Thurston - *Team Leader*

Christian Baer - *Backend Architect*

Tavion Yrjo - *Backend Developer*

Colin Willenborg - *Mobile Developer*

Elizabeth Strzelczyk - *Web Developer*

Erich Brandt - *Web Developer*

Weekly Summary:

The goal for this past week was to continue with the work on the UI for both Android and Web applications. We wanted to get Mapbox integrated into both and a more defined backend. We also wanted to continue with improving the Web Scraper's capabilities.

Past Week accomplishments:

There was an improvement on the web scraper getting more data and being able to connect to the database. Minor improvements to the UI on both android and web applications. Started a basic implementation of the A* algorithm.

Pending Issues:

- Web Scraper - Trying to get the google search to be at the users location.
- Some stores don't allow web scraping so the range of our stores we can use is limited to what information we can get from the google shopping tabs unless we buy the individual stores api packages.

Individual Contributions:

| Name | Individual Contribution | Hours this week | Total Hours |
|----------------------|--|-----------------|-------------|
| Colin Thurston | Web Scraper improvement with the amount of data getting and started working on A* implementation. | 6 | 19 |
| Christian Baer | Created Foundation for Web API. Created SQL Tables | 6 | 16 |
| Tavion Yrjo | Continued implementation of Mapbox. Bug fixing. | 4 | 14 |
| Colin Willenborg | Made minor UI changes and started trying to figure out how we wanted to go about making the API calls with the backend. | 4 | 21 |
| Elizabeth Strzelczyk | Updated sidebar navigation UI and gave it a fresh, clean look. Created a baseline settings page for the web application. | 4 | 14 |
| Erich Brandt | Finished functionality of the sidebar for the web application. Added a blank settings page to be finished later. | 5 | 15 |

Plans for upcoming week:

- Web API- Christian
 - Explore Use of Entity Framework for API
 - Create Objects for Database Tables and Views
- MySQL - Christian
 - Modify MySQL views for Web API use
- Mobile app - Colin Willenborg
 - Polish up UI as needed
 - Start implementing API calls to the backend and start up communication with the database.
 - Iron out any new details at advisor meeting
- Mapbox - Tavion
 - Continue implementation of the Mapbox map.
 - Work on displaying routes based on location data.
- Algorithms - Colin Thurston
 - Get a specific location to search for items in the Web Scraper.
 - A more in depth A* algorithm to test finding the shortest path
 - Get more detailed data from either google maps or from the store page
- Web app - Elizabeth/Erich
 - Start working on displaying lists on the home page

- Adding a list page that will showcase the specific items in a list upon clicking the desired list
 - Add a search functionality to add items to a list
- Connect the login functionality to a backend device

Summary of bi-weekly advisor meetings:

We meet bi-weekly with our faculty advisor, so we did not have a meeting this week.