Status Report 3

EE / CprE / SE 492 - sdmay25-06

Iowa Adventure Cyclists Course Creator

Week 5 Report

August 2024 - May 2025

Client & Faculty Advisor: Julie Rursch

Team Members

Kayley Clark - Technical Lead

Tanner Smith - Algorithm Architect

Nayma Garcia - UI/UX lead

Grant Pierce - Client Relation Manager

Nick Thoms - Testing

Eli Newland - Task Manager

Wan Elisa Wan Sarif - Component Design

Summary

This week we made some good progress on both frontend and backend. The frontend team worked on several key screens and made some updates to the overall UI of the app. We also fixed the navigation between screens so it feels more natural to use. On the backend side, we improved our route planning algorithm to continues working on connecting our database to the API. We also did a team code review to first, establish coding standards throughout our app, and then made sure all our code was following those standards, and refactored any code that wasn't.

Past Week Accomplishments

Tanner and Eli kept working on the route planning algorithm, focusing on getting it working with our database. They spent time figuring out how route data should be structured for efficient storage and retrieval. Kayley and Nayma updated several UI screens, especially the route creation and details views. They also made the flow between screens smoother based on feedback from our testing.

Elisa created more detailed component designs and helped make our UI elements consistent across the app. Grant improved our authentication flow and fixed some issues with token management. Nick continued testing both the front & backend progress, writing test cases for our core functionality. He also helped spot code that didn't match our new standards.

Pending Issues

One of our main challenges this week was figuring out the best way to get real data from the API instead of using static data. We're looking into a cache style approach where we call the API periodically to update the database. We're also still working on getting the frontend and backend to communicate smoothly. We've figured out how they should interact, but there are still some inconsistencies in how data passes between them. Our error handling also needs work to deal with bad user inputs.

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Kayley Clark	Updated route creation screens and helped set UI coding standards. Led discussions on connecting frontend with backend.	7	75
Tanner Smith	Worked on connecting route planning algorithm to our database and created documentation on how the backed will pass data so the frontend can refactor to "get" the data.	8	81
Nayma Garcia	Made navigation between screens more intuitive and updated route details view with better visuals.	7	73
Grant Pierce	Fixed authentication flow issues and sorted out token management problems.	6	76

Nick Thoms	Expanded test coverage, wrote more test cases, and found code that needed cleaning up.	7	73
Eli Newland	Worked on database connections for the route planning algorithm and helped set backend coding standards. Also started looking into how to export route data to gpx	7	79
Wan Elisa Wan Sarif	Created standardized component designs and helped make UI elements consistent across the app.	7	71

Plans for Coming Week

Next week we'll focus on continuing work on our key frontend screens, with both updating UI and creating any missing screens, and making sure the UI and backend are communicating. The backend team will keep improving the route planning algorithm, optimizing data storage, and making sure our API communication works. We'll also work on fixing remaining security issues.

We also want to expand our testing to catch bugs and make sure everything's stable. Lastly, once we get our front and backend talking we will want to start working on:

- Getting the routes to visualize on the map

- Saving routes to profiles

- Exporting to GPX