

Status Report 1

EE / CprE / SE 492 - sdmay25-06

Iowa Adventure Cyclists Course Creator

Week 1 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

The team has spent the past week working on creating a task board, with all of our future work that we plan to develop throughout this semester. Additionally the team met and got caught up to speed on what members contributed during the semester break.

Past Week Accomplishments

Tanner has made progress on developing and refining the path generating algorithm, which forms a crucial component of our application. He is now collaborating closely with Eli to integrate this algorithm with the application's API. Eli's working on database management and API development to ensure smooth integration and optimal performance. Meanwhile, Kayley and Nayma had discussions regarding necessary frontend design modifications, carefully

evaluating the user interface and identifying specific pages that need to be developed to enhance user experience. Following these discussions, Elisa took the initiative to create comprehensive mock-ups for all the required screens, providing visual references for the development team.

The team has thoroughly analyzed the feedback received during the previous semester and is actively implementing improvements based on these insights. We are currently updating the numerical specifications in our design documentation and addressing various minor modifications that were identified. In a meeting, Nick and Grant delved into the cybersecurity concerns that were highlighted during the final presentation. They also discussed a testing plan. The entire team maintains high enthusiasm and momentum as we begin this semester, ready to build upon our previous work and drive the project forward.

Pending Issues

File structure in the backend folder

The team has been having dependencies issues, however this may be resolved.

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Kayley Clark	Worked with Nayma to create task list for the frontend	6	56
Tanner Smith	Worked to redesign the structure of the route planning file and function structure pseudocode to be more clean.	7	59
Nayma Garcia	Worked with Kayley to create frontend task list and divide work	6	54
Grant Pierce	Worked on dependency issues and continued working on getting two factor authentication (Okta) integrated into our current structure. Additionally, worked on error handling for timeouts.	6	56
Nick Thoms	Worked on testing plan. Started putting together basic unit tests.	6	54
Eli Newland	Worked to reformat the design document to account for comments made at the end of	7	58

	semester presentations. Mostly to do with formatting issues.		
Wan Elisa Wan Sarif	Created and shared mockups of screens for frontend to create	6	50

Plans for Coming Week

Frontend Development:

On the frontend, we will continue developing and refining UI screens to enhance user experience, ensuring consistency across different devices.

Backend Development:

On the backend, we will establish a standardized nomenclature for variables, functions, and endpoints to improve clarity and maintainability. Additionally, we will define a structured file organization to support scalability as the project progresses throughout this semester. When it comes to the route planning portion of the backend, we hope to begin implementing the graph datastructures that will be used to store road data and execute route planning functionality.

Client Coordination:

Also, we will be meeting with our client to present our initial progress, gather feedback, and discuss potential refinements. Based on the discussion, we will update our project roadmap to add any necessary adjustments.