Report 3

EE / CprE / SE 491 - sdmay25-06

Iowa Adventure Cyclists Course Creator

Week 4 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

Past Week Accomplishments

This week, the team made significant progress in laying the groundwork for the project. They developed a comprehensive initial timeline, ensuring that all major milestones and deadlines were accounted for. Additionally, the team engaged in brainstorming to identify and prioritize essential features for the program, taking into consideration both user needs and technical feasibility. To prepare for the development phase, team members set up their Integrated Development Environments (IDEs) and installed all necessary software, ensuring a consistent and efficient development environment across the team.

The team also continued their in-depth product research, expanding their understanding of the market and potential user base. They identified and categorized various potential user types for the application, considering factors such as cycling experience, technological proficiency, and specific needs. Each team member took on the task of analyzing different mapping software platforms, evaluating their functionalities, user interfaces, and overall user experiences. The team plans to incorporate the best features from these existing solutions into their Cyclist Course Creator app, aiming to create a comprehensive and user-friendly tool.

The research findings have provided valuable insights that will shape the app's design and functionality. The team has concluded that the app's overall design should closely resemble the Garmin Connect app, a decision based on familiarity between Garmin users, and the Course Creator app users. This approach will allow users to interact with the new application in a similar manner to what they might already be accustomed to, reducing the learning curve and enhancing user adoption. For the map functionality, the team has decided to mirror Google Maps, recognizing its extensive features and user-friendly navigation system. This decision aims to provide users with a powerful and intuitive mapping experience within the cyclist course creator app. Furthermore, the team plans to incorporate features inspired by Strava, such as route sharing capabilities and an integrated messaging system.

Pending Issues

NA

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Kayley Clark	Researched Strava capabilities	1	4
Tanner Smith	Set up project repo locally, Installed correct IDEs, compiled a list of possible users to get feedback/input	1	4
Nayma Garcia	Set up repo locally, looked into connecting to Garmin	1	4

Grant Pierce	Set up repo locally, researched secure communication protocols	1	5
Nick Thoms	Git setup, Researched design practices and domain modeling	1	4
Eli Newland	Set up repo locally, Set up IDE's, researched current google maps functionalities	1	4
Wan Elisa Wan Sarif	Researched apps such as Strava and Garmin for component design	1	4

Plans for Coming Week

- Meet with advisor

- Get a demo application running, connected to front end, back end, and database

- Create a concrete timeline for when features should be expected to be completed