Report 7

EE / CprE / SE 491 - sdmay25-06

Iowa Adventure Cyclists Course Creator

Week 6 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 really focused on documentation and creating a clickable figma prototype. Creating the design and how the screens should interact with one another. Elisa, Nayma, Eli, and Nick spent time fine tuning the design and doing user testing functionality. The team met to discuss the other competitor applications and assigned one of the user types to each team member and looked at the designs from those specific perspectives.

Kayley worked on setting up the SQL server on the ubuntu virtual machine that ECG has provided until the end of the semester. Kayley also looked in to the data

types and discuss with other team members the benefit of having a static or dynamic database. If all of the data from the DOT API is stored in the database, the calls from the application would have a quicker response time. However, for future use, dynamic may be better as the database would need less maintenance. Tanner worked with Kayley and created an ER Diagram for the database, as well as looked into the implementing Dijkstra's algorithm.

Grant worked on the security of the application, as we had some design changes to the Login screen, Grant had to update his original plan. Additionally, the group has came together to discuss whether having a one time passcode functionality being sent to a user when logging in would be a better plan, as this would then not require an API call to check a password, the passwords would not be stored in a database making the app overall more secure.

Pending Issues

- Need to find a way to create the map functionality in application without coordinates

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Kayley Clark	Set up the VM and worked on ER diagram with Tanner	6	30
Tanner Smith	Created ER diagram, worked on application of Dijkstra's algorithm	7	31
Nayma Garcia	Worked on Figma prototype board, the friend screens specifically	7	29
Grant Pierce	Fixed login security, worked on implementing one time passcodes instead of passwords.	6	31
Nick Thoms	Worked on Figma prototype board, specifically the home page and settings screens	6	29
Eli Newland	Worked on Figma prototype board, specifically the map board.	6	30

Wan Elisa Wan Sarif	Worked on documentation for project, as well as Figma prototype board.	8	30

Plans for Coming Week

- Start uploading data onto server

- Finish Figma board

- Working on frontend design