IOWA ADVENTURE CYCLIST COURSE CREATOR

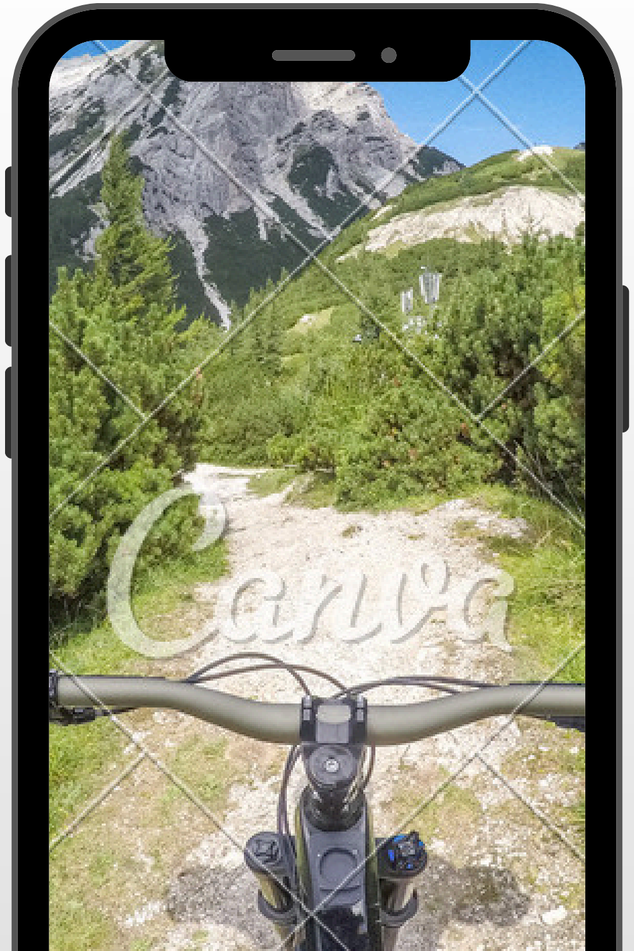
PROJECT PLANNING

SD MAY 25 -06

PROJECT OVERVIEW

THE CREATION OF A MAPPING APPLICATION FOR CYCLISTS THAT CAN:

- Use mapping utility to create routes that can be exported to GPS devices or other applications
- Identify different types of road surfaces and elevations of intended route



- Identify average traffic flow of intended route
- Identify potential roadblocks and safety hazards

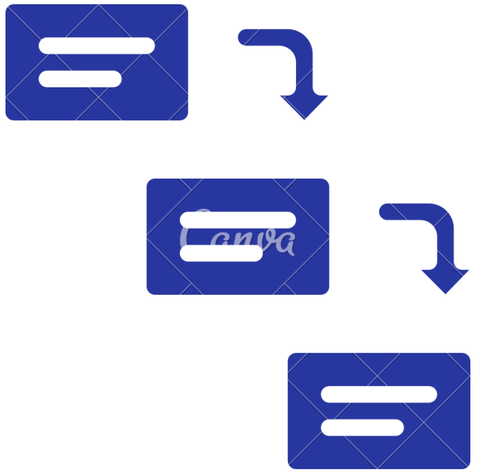
PROBLEM STATEMENT

- Cyclists need a way to determine the surface classification of unfamiliar roads when charting out a path ahead of time

- Some cyclists prefer to stay on paved roads while other adventure cyclists seek out rougher “Class B” roads

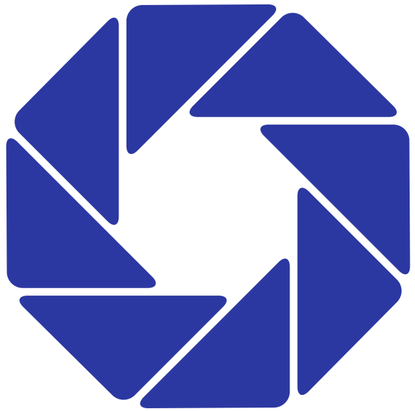
HYBRID MANAGEMENT STYLE

Waterfall



- Overall sequential development over semesters
- Iterative sprints for system development

Agile



- Weekly meeting to discuss progress and assign tasks
- Iterative system testing throughout creation

HIGH LEVEL TASK DECOMP

Project Creation

- Determine Requirements
- Screen Prototyping
- System Setup
- Connect System To DatabAse
- Connect to Apls
- Setup login

Feature Implementation

- Algorithm creation for pathfinding
- Route Creation
- Export GPX to Garming
- Save Routes
- Share Routes
- System Test

RISK AND MITIGATION

Usability

Risk: User is unable to easily navigate the application's UI and successfully complete intended tasks.

Mitigation: Use good design practices and adhere to engineering standards.

Availability

Risk: System crashes and data loss could prevent user from successfully planning their route.

Mitigation: Having stored favorites will act as a back up and provide an option in times of failure.

Accuracy

Risk: Inaccurate information could lead to dead end routes or safety concerns for our users.

Mitigation: Pulling data from different api sources in addition to allowing users to post warnings will bolster acuuracy.

CONCLUSION

- **Our app prioritizes cyclist safety, convenience, and personalization**

- **Next Step: Continue refining user requirements and begin development of the core features**

QUESTIONS?