Project Plan Presentation
Car-net DriveView Social Competition App

The Capstone Experience
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Functional Specifications

• Translate data into a fun and engaging experience
• With social competition app
• To encourage VW clients to become better drivers
Design Specifications

- Leaderboard to rank users based on an overall driver score
- Change parameters of the leaderboard
- Click on another user to see your head-to-head score breakdown
- Achievements the user can complete to promote safer driving
- Click on a specific achievement for more detail
- Ability to make changes to personal profile
Screen Mockup: Experience
Screen Mockup: Interface
Screen Mockup: Interface
Technical Specifications

• Amazon
  ▪ AWS Relational Database Service
  ▪ AWS Elastic Compute Cloud
  ▪ MySQL and Flask

• Firebase
  ▪ User authentication

• Volkswagen App
  ▪ Android Studio

• Swagger & Postman
System Architecture
System Components

• Hardware Platforms
  ▪ An Android Phone
  ▪ Android Emulator (Nexus 7 API 30)
  ▪ Android OS (10+)

• Software Platforms / Technologies
  ▪ Android Studio, Firebase
  ▪ VS Code
  ▪ Python, Flask
Risks

• Determining user score
  ▪ Create an algorithm to determine an accurate score based on sensor data
  ▪ Develop and test multiple solutions with sample data

• Creating a UI that works functionally and aesthetically
  ▪ Lack of experience in Graphic Design will slow progress towards a good UI solution
  ▪ Consult with contact at VW to assist in creating a good UI

• Data Analysis
  ▪ Determine the best approach for parsing data from the database, as well as link the data through relations
  ▪ Map out database layout and relations in external software for easier visual analysis
Questions?