

# EE/CprE/SE 492 WEEKLY REPORT 2

2/1/2020-2/13/2020

Group Number: 17

Project Title: Development of an App for Android Smart Phone for Pavement Roughness Estimation

Client/Advisor: Halil Ceylan

Team Members:

Tanner Dempsay – Communications Manager

Joe Van Treeck – Data Manager

Christian Royston – Git Master

Justin Kuennen – Web Master

Greg Starr – Logistics Manager

Kyle Eckrich – Report Manager

## Weekly Summary

- Backend
  - Kyle has completed setting up a MongoDB instance on the server side, and is working on an interface to connect the server to the database to read/write. We will start testing this interface with the user login operations.
  - Tanner has completed the user login library and is beginning to test the functions from server and client side.
  - Timestamps have been added to the csv files outputted at the end of a route.
- Frontend
  - Justin is working on the main UI of the application, including navigation between screens and how to make reusable views that we can easily change.
  - Christian has finished the login screen and is working on the create account screens. Tanner will work with him to plug in network communication functionality next week.
  - Tanner and Joe have updated the prototype app to use a faster sampling rate for the accelerometer data (5ms).
  - Greg is working on integrating the route record functionalities into separate libraries.
- IRI calculation
  - Joe has continued gathering data collection with our prototype application and running it through his Python tool. Tanner is working on creating the Python daemon that will use Joe's calculation stuff on incoming data points from the server.

## Past Week Accomplishments

- Modified proto app uses faster sampling rate
- User account management library complete on server
- Database instance created on server

## Individual Contributions

<u>Team Member</u>	<u>Contributions</u>	<u>Hours This Integration</u>	<u>Cumulative Hours</u>
Tanner Dempsay	Updating prototype app for faster sampling rate, finished user account stuff on server.	14	26
Christian Royston	Finished login screen for Android app. Working on create account screen	15	25
Joe Van Treeck	Worked on prototype app updates and collecting more route data to test Python tool.	17	32
Justin Kuennen	Working on recycling views for UI navigation in Android app	14	24
Kyle Eckrich	Finished database setup and working on server<->db interface	18	28
Greg Starr	Working on route record view for Android app	13	23

## Plans for the Upcoming Week

- Finished server to database connection
- Test user account management communications form frontend to backend
- Create Python daemon rough draft
- Finalize Python IRI calculations