

EE/CprE/SE 491 WEEKLY REPORT WEEK 10

March 18, - March 24

Group Number: 14

Project Title: IoT Passive Monitoring of Assisted Living Homes

Client: Andrew Guillemette, Optical Operations

Advisor: Goce Trajcevski

Team Members/Role:

Trevor Henderson	--	Test Engineer
Nick Schneider	--	Meeting Scribe
Austin Kerr	--	Chief Engineer
Austin Sudtelgte	--	Chief Engineer
Ryan McCullough	--	Meeting Facilitator
Josh Blanck	--	Report Manager

Weekly Summary

Met as a Team on Monday. Discussed the Azure platform and the application. Met with Advisor and Client on Monday. Discussed how the project plan and design document can be improved. Client requested a Bill of Materials for the testing apparatus. Met as a Team on Wednesday. Discussed the server and database. Met as a team on Friday. Discussed tasks to perform (project plan, lightning talk) and linking Visual Studio to GitLab.

Past week accomplishments

All: Began work on Project Plan v2, delivered BoM for testing apparatuses. Setup development environment(s) for the Application segment. Decided on a table format/schema for the database: 1 table per sensor + 1 user data table. Data will be transmitted as a JSON: sensor generates an event, wraps that with sensor id, sends to local server, local server wraps with user id, sends to DB, and is inserted appropriately.

Trevor Henderson: Set up Cosmos DB using Java Spring Boot as an interface for the Item Collection. Began work on REST endpoints so that the local server and mobile clients can access the data being stored on the cloud.

Nick Schneider: Transcribed notes during team, advisor, and client meetings. Looked into android development, and switched from Android Development Studio to Visual Studio in order to use Xamarin. Completed practice exercises to learn how Xamarin works. Setup git repository and completed git exercises.

Austin Kerr: Installed Xamarin and worked on some example projects/ general learning how to use the software. Helped on the project plan.

Austin Sudtelgte: acquire sensors from client, work on project plan and design document, helped with GitLab integration for visual studio and helped set up visual studio for those who were unfamiliar with the environment.

Ryan McCullough: Made significant changes to the project plan and design document and led team in finding sections that needed to be changed and updated. Began working with xamarin and visual studio

Josh Blanck: Setup Xamarin environment, ensured connection to GitLab, began work on test applications.

Pending issues

None.

Individual contributions

Name	Individual Contributions	Hours this week	Hours Total
Trevor Henderson	See past week accomplishments.	7	24.5
Nick Schneider		8	27
Austin Kerr		4.5	24
Austin Sudtelgte		5.5	27.5
Ryan McCullough		6.5	24
Josh Blanck		7	26.5

Plan for coming week

Trevor Henderson: Finish REST endpoints and begin working on setting up a platform for big data analytics that will be used next semester.

Nick Schneider: Add a significant amount of functionality to Android application. Make sure login screen and raw data visualization is complete.

Austin Kerr: Sort out the lightning talk and work on the backend section of the app in Xamarin.

Austin Sudtelgte: Work on design document, get the micro SD cards loaded with Raspian linux work day saturday.

Ryan McCullough: Continue to work on the Xamarin app and make changes to the design document.

Josh Blanck: Work on Project Plan, Lightning Talk, work on test applications in Xamarin.