EE/CprE/SE 491 WEEKLY REPORT WEEK 6
February 11, - February 17
Group Number: 14, "Anonymous Animals"
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 with Client on Sunday. Met as a team on Monday. Met with advisor on Thursday. Met as a team on Friday. Finalized and began cloud platform setup.

Past week accomplishments

All:

Client meeting focused on clarifying requirements for sensor justifications. Wearable sensors are no longer explicitly excluded from the system, but our team will only look into wearables in an effectively nominal capacity.

Monday team meeting focused on developing use cases. We set up our Gitlab board and issue tracking, we are transitioning into using Gitlab for most not in-person discussion. Decided on team name: "Anonymous Animals".

Advisor meeting centered on our developed use cases, and the reasoning behind making them: the intent is to give us a guide as we create this system. Various other resources and technologies were brought up: IBM Bluemix, Python Spark, and Olympic monitoring.

Friday team meeting focused on deciding on a cloud platform. The ultimate decision settled on Microsoft Azure, in lieu of Google Cloud and AWS.

Trevor Henderson:

Technical Progress: Start setting up cloud platform under Azure.

Other Progress: Decided On load cell sensor. Also researched best cloud platform for Our project and consulted with team members on the outcome. Researched Motion Detection sensors and finalized the reasoning behind each sensor decision.

Nick Schneider:

Researched more about sensing electrical usage and came to the conclusion that the best sensor would be too expensive. We are holding off on electrical monitoring for the moment. Worked on the use cases that we will be using for the project and helped assemble a good outline for our future work. Attended all meetings and took notes with the help of Josh who took notes at the beginning of a meeting I was late to.

Austin Kerr:

Looked into different cloud platforms and decided with the team that our best choice for the project was Azure. Searched for different flow sensors and researched what technical specifics are needed for attaching to a sink and a shower. Brainstormed use cases and tried to determine how each sensor would be physically set up in the homes.

Austin Sudtelgte: Looked into cloud platforms and specific sensors. Determine use cases, work on project plan

Ryan McCullough:

Researched our cloud server. I wanted azure because it integrated well with the other technologies like xamarin we are considering using.

Josh Blanck:

Researched into our cloud platform. My pick is Azure because it seems integration with other useful technologies (IoT, Analytics) is baked in. Compared to Google Cloud, where information on such integrations wasn't exactly touted as a feature.

Pending issues

N/A

Individual contributions

Name	Individual Contributions	Hours this week	Hours Total
Trevor Henderson	See past week accomplishments.	4.0	12.5
Nick Schneider		3.0	11.5
Austin Kerr		3.5	11
Austin Sudtelgte		5	16.5
Ryan McCullough		3.5	12.5
Josh Blanck		4.0	14.5

Plan for coming week

Austin Kerr: Research various Azure services that we could use. I am also going to look into Raspberry Pi's as I do not have much experience with them.

Austin Sudtelgte: Create list of sensors and the Pi loadouts, determine locations of sensors, compile list of azure services that we will use

Ryan McCullough: Research xamarin and set up mobile app.

Josh Blanck: Collect bios and photos from everyone, post to site. Research Spark, Bluemix.