

# EE/CprE/SE 492 Bi-Weekly Report 6

Group 18

11/9/19 - 11/22/19

IoT Elderly Care Solution

**Client:** Andrew Guillemette     **Advisor:** Daji Qiao

## **Team Members:**

<b>Jared Griffin:</b>	Web App Engineer and GitLab Administrator	<b>Siyuan Zeng:</b>	Behavior Logic and Testing Engineer
<b>Nidhi Dalvi:</b>	Meeting Facilitator and Hardware Engineer	<b>Robert Guetzlaff:</b>	Hardware/Software Engineer
<b>Tyler Borchert:</b>	Hardware and Testing engineer		

## **Bi-Weekly Summary:**

This period we evaluated the status and goals of the project and adapted to the loss of a group member.

## **Last Period's Accomplishments:**

- Tyler
  - Finished an implementation of the hardware code.
    - Detect open and closed “doors” based on gyroscope and accelerometer data.
  - Ran some tests on the implementation in my apartment.
  - Debugging
- Jared:
  - Finished overview section of the overlay dashboard for the web application
- Robert
  - Built new backend for our predecessors smart outlet code
  - Finalized data relay code
- Nidhi
  - Helped tyler with finishing implementing hardware stuff.

- Siyuan:
  - Rearranged the endpoints to make the path and data more understandable.
  - Implemented the logic for each meal. It is more accurate now.

**Pending Issues:**

Tyler:

- New bug arise where sensors start disconnecting after a certain time.
  - Currently working on a fix for this issue.
- Continuously working on calibrating the thresholds for open/closed detection with the sensors.

Siyuan: New logic is not complete, not many problems appears, just need some time to implement

**Individual Contributions:**

Member Name	Individual Contributions	Hours this Period	Cumulative Hours
Jared Griffin	Finished overview section of the overlay dashboard for the web application	8	69
Siyuan Zeng	Rearranged code and endpoints for logic server. Making a new logic to replace the older one.	10	89
Nidhi Dalvi	Finished hardware implementation	10	84
Robert Guetzlaff	Apache backend for smart outlet Data relay code Learned how previous groups smart outlet code operated	12	97
Tyler Borchert	Worked on finishing up hardware implementation. A lot of testing and debugging.	25	125

**Plans for the Upcoming Period:**

- Jared
  - Build overview details section and activity logger for the overview dashboard of the web application
- Tyler:
  - Fixing the connection issue.

- Installing current design into Bob's apartment.
- Robert:
  - Assist with install of system in test apartment
  - Monitor operation of smart outlet and data relay in test apartment
- Nidhi:
  - Configuration of sensors
  - Fixing bugs
- Siyuan:
  - Keep implement the logic.
  - Make source code more readable.

**Summary of Weekly Client Meeting and Bi-Weekly Advisor Meeting:**

Client Meeting: 2019/11/17

Outlined status of project and goals for the end of the semester. Discussed what should be presented to our advisor and at the final presentation.

Advisor Meeting: 2019/11/21

Ran through the current status of the project. Also gave a demo of the door sensors connecting to a Pi.