

Senior Design 491 - Weekly Report - DEC15-04 Week 14 (4/20/15 - 4/27/15)

Advisor: Suraj Kothari
Project: Future Wearables
Client: Ted Krepos (“*Krepos Physical Therapy and Performance*”)
Ensoft - Jeremías Saucedo
Members: Aaron Reyes - Team Leader
Nick Plutt - Webmaster
William Park - Communication Leader
Josh Cline - Key Concept Holder #1
Nick Gonner - Key Concept Holder #2

Weekly Recap:

After our presentation with Ted, this week was all about practicing and preparing for our final presentation for the end of the first semester.

Meeting Overview:

April 21 \ 26 \ 27, 2015 - **Meeting-19 / 20 / 21**

Duration: 3 Hours

Attendance - **19 / 20 / 21**

William Park	Present for all
Nick Plutt	Present for all
Aaron Reyes	Present for all
Josh Cline	Present for all
Nick Gonner	Present for all

1. This week revolved around coming to a stopping point for our first semester. We finished up / update our design documentation as well as prepared for our presentation on Tuesday (April 28).

DEC15-04

2. On the 21, we met as a team to discuss what needs to be updated within the project plan as well as the design documentation. We also discussed how we would like work with our presentation. We divided the parts up between all the members and each had till Sunday (26th) to come up with slides and topics to talk about.
3. On the 26th, we did multiple runs of our presentation to better practice ourself for the upcoming presentation.
4. The 27th, we made some last minute adjustments to our presentation and reviewed over some possible questions that could be given.

Accomplishments this week:

1. Practice times for the presentation seemed efficient.
1. We also had some ideas about what needs to happen during the Summer.

Pending Issues:

1. Our EMG sensor is collecting data that is not strong enough for our therapist to read. We need to research and figure out a solution to solve this problem.
2. Software application needs to get worked on during the summer session.
3. PCB and Battery solution for the hardware team needs to be completed during the summer session.
4. Create an actual wearable device by purchasing the last pieces to complete a working prototype.
5. Our microcontroller is not suitable enough for the amount of IMU's (4). We need to research and find a new microcontroller that fits our designs specifications.

Planning:

- i. Getting the design for the PCB finished. (Summer)
- ii. Getting the embedded system programming done
- iii. Assembling the first prototype.
- iv. Meeting for Summer Plans (Everyone besides Nick G. will be here in Ames)
- v. Software Team needs to create a plan of action for the Summer term to create an application that is usable on an Android Device.
- vi. EMG solution needs to be researched.
- vii. Need to find a replacement microcontroller for the Pro Micro.

Individual Contributions

Aaron : -- (3 hr)

- i. meetings
- ii. presentation practice
- iii. Presentation

William: -- (3.5 hr)

- i. Weekly Report
- ii. Meetings
- iii. presentation practice
- iv. Presentation

Josh: -- (7 hr)

- i. Meetings
- ii. presentation practice
- iii. touching up weekly reports
- iv. Presentation
- v. Design Document / Project Plan

DEC15-04

Nick P: -- (3.5 hrs)

- i. Meetings
- ii. Website organization
- iii. presentation practice
- iv. presentation

Nick G: -- (3 hr)

- i. Meeting
- ii. presentation practice
- iii. presentation

Total Contribution for the Project:

Aaron Reyes (49.2 hrs)

William Park (40.5 hrs)

Josh Cline (66.3 hrs)

*Nick Plutt (49 hrs)

Nick Gonner(55.1 hrs)