

## **Senior Design 491 Weekly Report 5**

**Week 5 (9/28/15 – 10/4/15)**

**May1624 -- Programmable Wireless Sensor Package for CprE Education**

**Advisor/Client:** Dr. Thomas Daniels

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### **Team Members -- Roles:**

Yidong Liu – Team Leader

Xinian Bo – Team Webmaster

Niklas Jorve – Team Communication Leader

Branden Sammons – Key Concept Holder

Jonathan Krueger – Key Concept Holder

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### **Weekly Summary:**

During this week, we prioritized working on the project plan. During our meeting with our advisor on Monday, we used the time to revisit our idea of using a PS4 controller for our final project. After discussing the pros and cons again, we decided that a more effective solution would be to use a raspberry pi with a custom PCB (printed circuit board) on top of it with a battery solution and multiple extra sensors. For our group meeting, we finished the project plan so that we could submit it on Saturday 10/3.

### **Weekly Accomplishments:**

1. Decided on using raspberry pi with PCB for project
2. Finished and submitted project plan
3. Started planning design document

### **Advisor Meeting (9/28/15):**

**Duration:** 1 Hour

**Members Attending:** Niklas Jorve, Yidong Liu, Jonathan Krueger, Branden Sammons, Xianian Bo

**Notes:** Daniel's thoughts led to showing us a prototype for the charging and wireless additions for the arduino boards. Ideas are to make a printed circuit board about the same size to add on behind the arduino board. This board would have plenty of room for battery, bluetooth, and circuit. if the room

provides we can add more things and all sorts of things. Reprogrammability was wanted via the stated wireless arduino package.

## **Group Meeting (10/2/15):**

**Duration:** 2 Hours

**Members Attending:** Niklas Jorve, Yidong Liu, Jonathan Krueger, Branden Sammons, Xianian Bo

**Notes:** During this group meeting we used our time to finish the project plan. We worked on calculating the expected time for our deliverables and tried making a reasonable guess at a time line to use. We also used the time to look over the rubric for the project plan to make sure we were including every required component.

## **Plans for Next Week:**

1. Start working on design document
2. Explore new idea of creating a custom PCB to put over the top of a raspberry pi

## **Individual Contributions:**

Niklas Jorve: Completed weekly report, attended meetings, worked on project plan
Yidong Liu: attended team meetings for 3 hours, worked on project plan for 1.5 hours
Branden Sammons: Team meetings and project plan
Jonathan Krueger: Lead team meetings and developed project plan
Xinian Bo: Team meetings. worked on our website.

**Project Contributions:**

<b>Member</b>	<b>Project Time this week (hours)</b>	<b>Total Project Time (hours)</b>
Niklas Jorve	4	13
Yidong Liu	4.5	10.5
Branden Sammons	4	9
Jonathan Krueger	4	10
Xinian Bo	4	8