

**Group number:** DEC1620

**Project title:** Miniature Tracking FOB

**Client & Advisor:** Flagger Pros USA, Advisor Nathan Neihart

**Team Members/Role:** Tristan Walters – Team Leader

David (DC) Carlson – Team Communication Leader

Brandon Trent – Secondary Team Lead

David Dalo – Key Concept Holder

Alex (Sunny) Sundholm – Secondary Communication Lead

Tyler Dahle – Team Webmaster

## **Weekly Summary**

As a group, we met on Wednesday to look through our hardware. We did not have a meeting with Dr. Neihart as he had his regular faculty meeting conflict. In place of the meeting, DC, Alex, Tyler, and Tristan met and worked on the web development side of our project, getting the website and database working. The software team (Tristan, Tyler, Alex) also met with the client on Wednesday to iron out things the client wants in their mobile application.

## **Past week accomplishments**

- Spreadsheet containing current and power draw calculations
- Database cleaned up
- Client meeting set clear goals for web applications

## **Pending issues**

- Managing component power consumption
  - Will be addressed when we have working prototype
    - Will be higher than final product because the microcontroller Launchpad and cellular chipset both have parts that will not ultimately be used.
- Waking a microcontroller from a low power sleep mode
  - Have GPS trigger different events?
- Cellular Communication
- Keeping microcontroller clock running?
  - Only want to update location once or twice a week
- Communication with database

### Individual contributions

Name	Individual Contributions	Hours this week	Cumulative hours
Tristan Walters	Attended client meeting and group meeting	1.5	29.5
David Carlson	Attended group meeting, researched UART communication between GPS and MCU	3	28
Alex Sundholm	Attended group and advisor meetings	1.5	27.5
Brandon Trent	Worked on firmware to send data to our server, not the cellular chip company's	2	42
Tyler Dahle	Attended client meeting and group meeting	2	34
David Dalo		0	17

### Comments and extended discussion

Now that we have parts, tasks are going to be divided amongst the group more. So far the main divisions have been Brandon leading a hardware team consisting of himself, DC, and David. Tristan is heading the software team consisting of himself, Tyler, and Alex, working on the web application and database. We need to meet more often to work on making physical progress and creating content rather than just preparing with research. That's our next step.

### Plan for coming week

- Meet Tuesday in/after class and plan meetings
- Install and set up Code Composer 6 on multiple computers so we can begin development of firmware
- Start building prototype

### Summary of weekly advisor meeting

N/A