

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

We had no meetings with the client, due to his being away. We had our regularly scheduled advisor meeting this Friday, February 26. We worked individually for most of the week, and compiled all of our research on Friday before our advisor meeting. Most our research is becoming real progress as our next major step is to order our prototype parts.

Past week accomplishments

- Selected candidate parts
 - Will be ordering prototype items this coming week
 - Microcontroller and breakout board
 - GPS breakout board

Pending issues

- Managing component power consumption
- Waking a microcontroller from a low power sleep mode
- Cellular Communication
 - Contacted Verizon, still trying to find a candidate cellular chipset that is compatible with their cell network
 - We have a 3rd party GSM chip that charges for activation and amount of data used per month if all else fails (communication with Verizon is difficult)
- Keeping microcontroller clock running
 - Only want to update location once or twice a week

Individual contributions

Name	Individual Contributions	Hours this week	Cumulative hours
Tristan Walters	Attended group and advisor meetings, helped complete Specifications homework	3	18
David Carlson	Attended group and advisor meetings, continued research on GPS candidate specifications	4	17
Alex Sundholm	Investigated candidate parts, began learning the IDE for our microcontroller	1	18
Brandon Trent	Attended group and advisor meetings, researched cellular chips and integration, contacted Verizon (took a long time), completed project timeline	5	27
Tyler Dahle	Attended group and advisor meetings, helped complete specifications homework and presentation slides	4	21
David Dalo	Found launchpad for microcontroller	1	12

Comments and extended discussion

Building from last week, our next objective is to buy our candidate parts and begin prototyping.

Plan for coming week

- Order parts
- Try and get more information from Verizon

Summary of weekly advisor meeting

Advisor meeting notes:

How do these things all fit together? Make a quick adaptor to get everything to fit.

The microcontroller is good. - order

DC's GPS module and evalve board is good as well. - order

Wait till next Friday on Verizon and if still have not heard pack go with the GSM.

Does the GPS recommend a certain antenna?

Do the chips have on board power regulators?

How would we host our web application? Talk to Mani on Tuesday.

This week order a couple microcontroller and GPS. Giver Verizon another week.

Give the orders to Lee. Or email ETG?

Read up on the MSP430 microcontroller. Do interrupt driven coding.

Download the Code Composer Studio 5 and start looking into how to use it.

Figure out how to shut down the watchdog timer. First thing to do.

Also look at the Power Management Module to ramp it down as well as the clock settings as well.

Look into how to set up the device IDs.