

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 Sundholm – Secondary Communication Lead

Tyler Dahle – Team Webmaster

Weekly Summary

This week we had no meetings with the client or our advisor due to conflicts, so all progress was individual. Alex did microcontroller research on the Arduino Pro Mini and its specifications. Brandon looked up libraries for communication with the cell network, and found a potential schematic for a chip we could use. David spent time working on the overall concept of our project tying in other developments. Now that we have access to our website, Tyler has started work building our personal site. Tristan worked on our overall plan for the project, including the timeline, necessary specifications, and general planning.

Past week accomplishments

- Completed research on Arduino Pro Mini
 - Operating voltage
 - Current draw
 - Low power mods
- Contacted Verizon about SIM Cards
 - Going to Verizon store next week
- David put forth possible battery option

Pending issues

- SIM Cards
 - Cost (\$4/card)
 - Microcontroller integration
- Batteries
 - Reliability in all weather conditions
 - Longevity
 - Frequency of replacement
- Data collection
 - Cell network?
 - Satellite?

Individual contributions

<u>Name</u>	<u>Individual Contributions</u>	<u>Hours this week</u>	<u>Cumulative hours</u>
Tristan Walters	Attended group meeting, completed homework	3	6
David Carlson	Attended group meetings, researched power draw	2	5
Alex Sundholm	Researched Arduino, Verizon SIM cards	3	6
Brandon Trent	Attended group meeting, researched connection to cell network	3	7
Tyler Dahle	Attended group meeting, began work on website	3	6
David Dalo	Attended group meeting, brainstormed continuation of overall concept	2	6

Comments and extended discussion

This week was quiet; our only meeting was this Friday afternoon. We put forth what everyone had done and assigned smaller tasks for the group. Most of our communication is done in a group chat, and all of our resources we add to a communal Google Drive. We put together the Project Plan, and we're going to finalize it on Monday afternoon.

Plan for coming week

- Meet Monday 1-2 to go over Project Plan
- Continue individual research

Summary of weekly advisor meeting

Dr. Neihart had a conflicting meeting and was unable to meet with us.