

Group number: dec1717

Project title: Irrigation Monitoring App

Client &/Advisor: Dr. Ajay Nair and Dr. Manimaran Govindarasu

Team Members/Role:

Team Leader: Sierra Lucht

Team Communication Leader: Landon Woerdeman

Webmaster: Sam Jackson

Key-Idea-Holder: Daniel Albers

Key-Idea-Holder: Seth Lightfoot

o Weekly Summary

This week, we continued with the development with our new prototype. After receiving the parts early this week, we were able to assemble them into our design. After updating the code for reliability and efficiency, we were able to test the new prototype's sensing and radio communication. Finally, we were able to update our project plan based on these changes so that it better applies to our new design.

o Past week accomplishments

- Daniel Albers: New chips and existing hardware are communicating over new radios
- Sam Jackson: Read android development tutorials, set up developer environment
- Seth Lightfoot: Researched more ways to make prototype code work
- Sierra Lucht: Update project plan V2 to correspond with new design.
- Landon Woerdeman: Setup github repository, connected it to our slack channel, and completed a swift tutorial that teaches how to build iOS applications.

o Pending issues

- Daniel Albers: N/A

- Sam Jackson: N/A
- Seth Lightfoot: N/A
- Sierra Lucht: N/A
- Landon Woerdeman: N/A

o Individual contributions

<u>NAME</u>	<u>Individual Contributions</u>	<u>Hours this week</u>	<u>HOURS cumulative</u>
Daniel Albers	Soldered all new boards and radios, correctly wired radios on new boards and existing microcontroller, wrote basic software to transmit between sensor and base station.	12	39
Sam Jackson	Research; Set up android developer environment	3	15
Seth Lightfoot	Research	2	19
Sierra Lucht	Updated project plan	2	21
Landon Woerdeman	Completed Swift Tutorial	3	18

o Comments and extended discussion

o Plan for coming week

- Daniel Albers: Get sensors hooked up into new boards, posting to base station, then to website, will begin work on finding hardware for base station.
- Sam Jackson: Begin development on Android application.
- Seth Lightfoot: Help support prototype software dev
- Sierra Lucht: Complete project plan for submission, begin testing prototype in greenhouse.
- Landon Woerdeman: Begin development on iOS application, now that I have some idea of what I am doing, and how XCode + Swift development works.

o Summary of weekly advisor meeting

We were unable to meet with our advisor this week.