

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 met with our advisor to discuss the current progress of our project and documentation. Based on his advice, we were able to complete the hardware prototype II by the end of the week, as well as update the documentation. We are in the process of updating our code so that we can get our new prototype in the field for testing this coming week.

o Past week accomplishments

- Daniel Albers: Hardware for sensor nodes completed, temporary hardware for head node complete.
- Sam Jackson: More research on Android development and environment setup.
- Seth Lightfoot: Got more info on prototype progress and started to understand code
- Sierra Lucht: Completed Project Plan V2 with updated prototype II
- Landon Woerdeman: Began UI layout of app

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 remaining components for nodes/base	4	43
Sam Jackson	More research on Android development / environment setup.	2	17
Seth Lightfoot	Worked to understand prototype progress and started to adapt software per Daniel's request	2	21
Sierra Lucht	Completed Project Plan	3	24
Landon Woerdeman	Began UI layout of app	2	20

o Comments and extended discussion

o Plan for coming week

- Daniel Albers: Complete head node hardware
- Sam Jackson: Break ground on Android application
- Seth Lightfoot: Work on software for prototype
- Sierra Lucht: Work on documentation and code to get prototype ready for testing.
- Landon Woerdeman: Continue to work on iOS code

o Summary of weekly advisor meeting

We sat down with our advisor and went through some of the technical details of the prototype and the challenges we are actively working to overcome. We made him aware of our overall design idea from a technical standpoint and accepted any critique he had to help improve our deliverable. We laid out milestones we would like to achieve in the next 6 weeks and etched a path to achieve those goals. We would like to be able to have a proof of concept network containing a head node and 2 slave nodes. The summer would be an excellent time to collect data from each slave node. Having our system ready for data capture during the summer will set us on the right foot as we tackle the packaging and client side software in the remaining semester.