

Group number: 17

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 (Short summary about what you did this week)

This week, we continued work on our design document. After receiving more input from our advisor, we completed the document for submission. Additionally, through working on the document, we revised our design vastly to include a base station which is connected to several different sensor nodes, which communicate over XBee. The Base Station then communicates with the user's phone over Bluetooth. With making these major changes, we have had to revise our plans, and purchase parts for future testing.

o Past week accomplishments (please describe as what was done, by whom, when or collectively as a group)

- Daniel Albers: Redesigned hardware for entire system - moving to sensor + base
- Sam Jackson:
- Seth Lightfoot: Updated Daniels code, and added additional functionality to code for sensor testing
- Sierra Lucht: Worked on completing design document.
- Landon Woerdeman:

o Pending issues (if applicable)

- Daniel Albers:
- Sam Jackson:
- Seth Lightfoot: Looks like sharing an ADC won't work for sensor testing.
- Sierra Lucht: N/A
- Landon Woerdeman:

o Individual contributions

<u>NAME</u>	<u>Individual Contributions</u>	<u>Hours this week</u>	<u>HOURS cumulative</u>
Daniel Albers	Hardware Redesign and spec	5	27
Sam Jackson			12
Seth Lightfoot	Wrote code for testing sensors	3	17
Sierra Lucht	Worked on Design Document, completed test plan	3	19
Landon Woerdeman			15

o Comments and extended discussion

o Plan for coming week (please describe as what, who, when)

- Daniel Albers: Get sensors up and running on new hardware, get sensors talking to some kind of base station.
- Sam Jackson:
- Seth Lightfoot: Work with Daniel to get a working sensors testing platform
- Sierra Lucht: Implement new sensor design, revise design document and project plan
- Landon Woerdeman:

o Summary of weekly advisor meeting (if applicable/optional)

This week in our meeting, we reviewed our design document with our advisor for feedback so we could revise accordingly. We also reviewed our updated system to examine for pending issues, such as Xbee or Bluetooth range and battery life. Based on our advisor's input, we included additional details in our test plan to ensure our system would account for these issues.