

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 to work on our project plan. Given the new information through blackboard, we modified our existing version based on the rubric, as well as input from our advisor and client. Additionally, we set up a test of our prototype against the current version in one of the horticulture department greenhouses. We are allowing this test to run for several days to collect data, with which we will make a decision about the accuracy of our sensor choice, and if it is a strong candidate to move forward with.

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

- Daniel Albers: Set sensor up to use wifi, collect data every 5 minutes, wrote php site for sensor to post data to and to view rough data in database.
- Sam Jackson: Read the materials pertaining to soil moisture hardware provided by the client.
- Seth Lightfoot: Continued research for project plan market research and software
- Sierra Lucht: Continue to work on project plan, now that class specifications were given.

- Landon Woerdeman: Began research on various soil sensors and their networking capabilities.

o Pending issues (if applicable)

- Daniel Albers: N/A
- Sam Jackson: N/A
- Seth Lightfoot: N/A
- 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	Sensor Setup, Website for posting/viewing data	6	15
Sam Jackson	Continued to research the materials provided by the client	2	7
Seth Lightfoot	Continued to conduct market research and applicable software	2	8
Sierra Lucht	Continue working to develop the project plan to match given specifications.	3	9
Landon Woerdeman	Began researching current soil sensors on the market	1	7

o Comments and extended discussion

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

- Daniel Albers: Look into interfacing existing sensor to microcontroller
- Sam Jackson: Research bluetooth interactivity in mobile environments
- Seth Lightfoot: I am going to shift some focus , and hone in on possible software solutions
- Sierra Lucht: Complete project plan, asses the accuracy of the prototype.
- Landon Woerdeman: Work on market survey of soil sensors to be presented in next week's meeting.

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

This week during our advisor meeting, we discussed the first draft of our project plan. We received feedback based on what we had completed, and direction on where to go from there. Additionally, we made plans to test our current prototype against the existing design for later this week.

Later in the week, we again met with our advisor and client to set up prototype testing. We were also able to tour the greenhouses to examine the current solution in place. We will take several days of measurements to determine the accuracy of our new sensor over the current version.

Grading criteria

Each weekly report is worth 10 points. Scores will be awarded as follows:

- **8 – 10:** Progress for your project seems to be suitable. Documentation and hours reported by team members are adequate.
- **6 – 8:** There is scope of improvement both in your report and your project progress. Can consult with instructor/TA after class for further inputs.
- **< 6:** Please talk to instructors/TA after class hours about any difficulties that you/your team is facing.