

EE / CprE / SE 492 Weekly Report

April 16 - September 5

sddec24-16

Designing a Smart Plant Nurturing System Enabled by IoT Technology

Faculty Advisor / Client: Md Maruf Ahamed

Team Members:

- Tejal Devshetwar - Frontend
- Holden Brown - Frontend/backend
- Blake Hardy - Backend
- Cameron Jones - Backend
- Cayden Kelley - Hardware
- Chase O'Connell - Hardware

Summary of Work:

We have reviewed the documentation of our progress on the plant care device from the previous semester. We also set up plans for when to meet for general meetings and sub-team meetings for the fall. Currently we have plans for setting up the PCB design to be used for power management of all components. The computer engineering team is focused on fixing the MODBUS communication issue with the NPK sensor, as this was one of our major roadblocks towards the end of the spring. The software team is focusing on full loop communications between the microcontroller and the server connected to the mobile app. Generally our work during this period is getting organized and back to the key issues we faced previously.

Work Period Accomplishments:

- Agreed upon general team meeting time of Thursdays at 1PM.
- Set up initial sub-team meetings for the next week.
- Reviewed everyone's progress/status
- Determined course of action for the semester including roles and responsibilities.

Plans for Coming Week + Action Items:

- Holden Brown - refresh on the projects outline and get familiar with the codebase. If everything goes smooth up until this point then I will find some software to work on.
- Tejal Devshetwar - Review app development milestones repositories. Work with Holden to determine next steps on app development.
- Blake Hardy - Work on testing existing libraries and hardware with modbus sensor, ideally get data readout from it.
- Cameron Jones - Revisit issue with MODBUS communication with microcontroller and continue to work on developing functionality.

- Cayden Kelley - Review the NPK functionality and help work towards functionality. Review power requirements of pot device.
- Chase O'Connell - Organize documentation on power requirements for the device. Begin drafting ideas for PCB design and intended functionality. Set up initial semester meeting with project advisor for the semester.

Pending Issues:

- Tejal Devshetwar
 - No issues
- Holden Brown
 - No issues
- Blake Hardy
 - No issues
- Cameron Jones
 - No issues
- Cayden Kelley
 - No issues
- Chase O'Connell
 - No issues

Individual Contributions:

Team Member	Contribution	Weekly Hours	Total Hours
Tejal Devshetwar	Nothing this week.	0	27
Holden Brown	Attended team meeting and got caught back up with the group.	0.6	50.4
Blake Hardy	Refresh knowledge of project, make plans for moving forward	0	28
Cameron Jones	Attended team meeting and got caught back up with the group.	0.6	27.6
Cayden Kelley	Attended team meeting and got caught back up with the group.	0.6	46.1
Chase O'Connell	Setting up meeting times, organizing team documents in preparation for the second semester of Senior Design.	1.5	29.5