

Team Members/Role:

Stone Widder - Technical Lead

Joshua Baringer - Microcontroller Lead

Rachel Teberg - Historian/Reporter

Evan Pasero - Project Manager

Charles Sang - Controls Lead

○ **Weekly Summary**

As this was our first week working together as a team, most of what we did was administrative work. We had our initial meetings with both Mr. Hansen, our client at Minufecture, and Dr. Jones, our faculty advisor. We set up a general schedule for weekly meetings and design reviews, as well as a broader top down schedule in which we detailed our long term goals for the semester. We determined what roles we would each have and began planning out our work schedule for the next two weeks. Finally, we began work on the hardware block diagrams, software block diagrams, and trade study.

○ **Past week accomplishments**

- Stone Widder: Worked on a pros and cons list for data sheets and did future planning around the hardware. Stone also bought a Beaglbone black so we can try to figure out some of the IoT backend, as no one in our group knows what we will need to do for that.
- Evan Pasero: Began work on the trade study, generated the top down general schedule for the semester, worked with team and client to determine weekly meeting times.
- Joshua Baringer: Started reading the data sheets for Beaglbone Black and esp-32 microcontrollers.
- Charles Sang : Researching and reviewing different types of PID control implementations for different types of microcontrollers
- Rachel Teberg: Created a scheduler using Excel, took notes in our various meetings, started preliminary research for trade study and set up recurring meetings with the team.

○ **Pending issues** *(If applicable: Were there any unexpected complications? Please elaborate.)*

- Losing a group member - Everyone

○ **Individual contributions**

<u>NAME</u>	<u>Individual Contributions</u> <i>(Quick list of contributions. This should be short.)</i>	<u>Hours this week</u>	<u>HOURS cumulative</u>
Stone Widder	Microcontroller research	6	6
Rachel Teberg	Made scheduler, took notes at meetings, started research for trade study	6	6
Joshua Baringer	Microcontroller research	6	6
Evan Pasero	Trade Study and Scheduling	6	6
Charles Sang	Controls research	6	6

○ **Plans for the upcoming week**

- Joshua Baringer: work on software description/block diagram, continue to study data sheets, buy food for Wednesday meetings.
- Stone Widder: Work on Software/Hardware block diagrams, and software requirements. Test some AWS IoT backend on the Beaglebone. Hopefully get test stand from mark set up
- Evan Pasero and Rachel Teberg: Research and document for trade study. Assist hardware and software teams as needed.
- Charles Sang: Coordinate with Stone on hardware block design while finishing research in control software/hardware implementation.

○ **Summary of weekly advisor meeting** *(If applicable/optional)*

(Provide a concise summary on the contents and progress made during the advisor meeting.)

During our first meeting with Dr Jones we talked about a few pitfalls that other groups in the past have fallen into and they include:

- Not prototyping in the first semester
- Not giving enough time each week to the project
- Thinking that the first semester is just all the documentation and the second semester is when all the work is done,

Dr. Jones also asked us to prepare a short presentation of our common project vision.