



Cranberry

EE496 Proposal Presentation



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Overview

- Introduction
- Cranberry Overview
- Semester Goals
- Learning Expectations
- Team Progress
- Gantt Chart
- Potential Problems



Introduction



Jennifer Chun

Team Member

- Senior
- Electrical Engineering
 - Electrophysics

Introduction



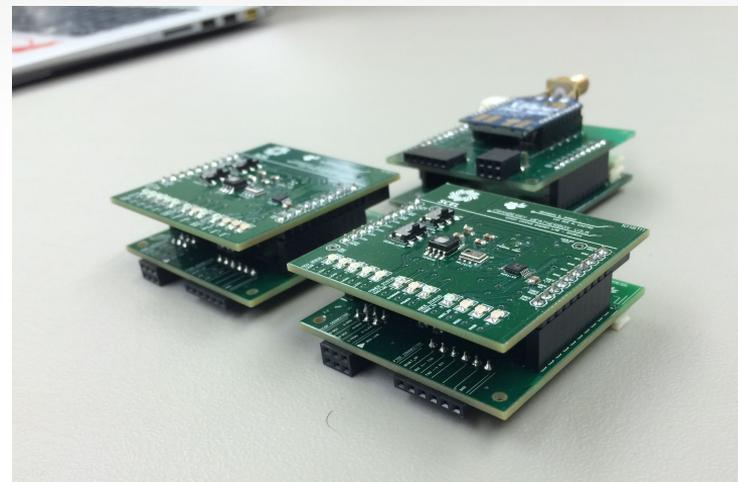
Joslyn Hamada

Team Member

- Senior
- Electrical Engineering
 - Electrophysics

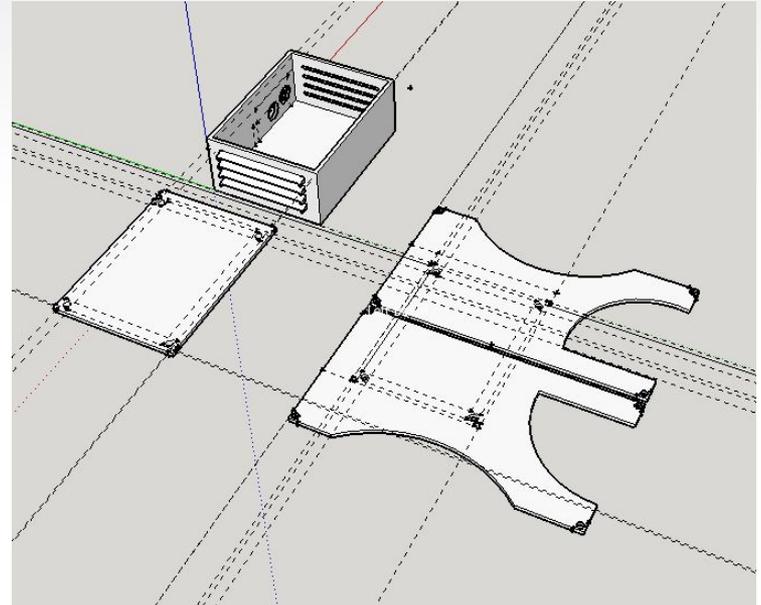
Cranberry Motivation

- Improve hardware of third generation Cranberry
 - Improve functionality
 - Maintain power consumption and small size
- Fourth generation weatherbox



Cranberry Design Overview

- 2.25" X 2.25" stacked boards
- Top: Sensor Board (4v)
- Bottom: Main Board (4v)
- Sensors:
 - Solar Irradiance, humidity, temperature, pressure
 - Version 4.0: GPS, real time clock
- Housing Design
 - Two main parts: box and panels
 - Mounting piece

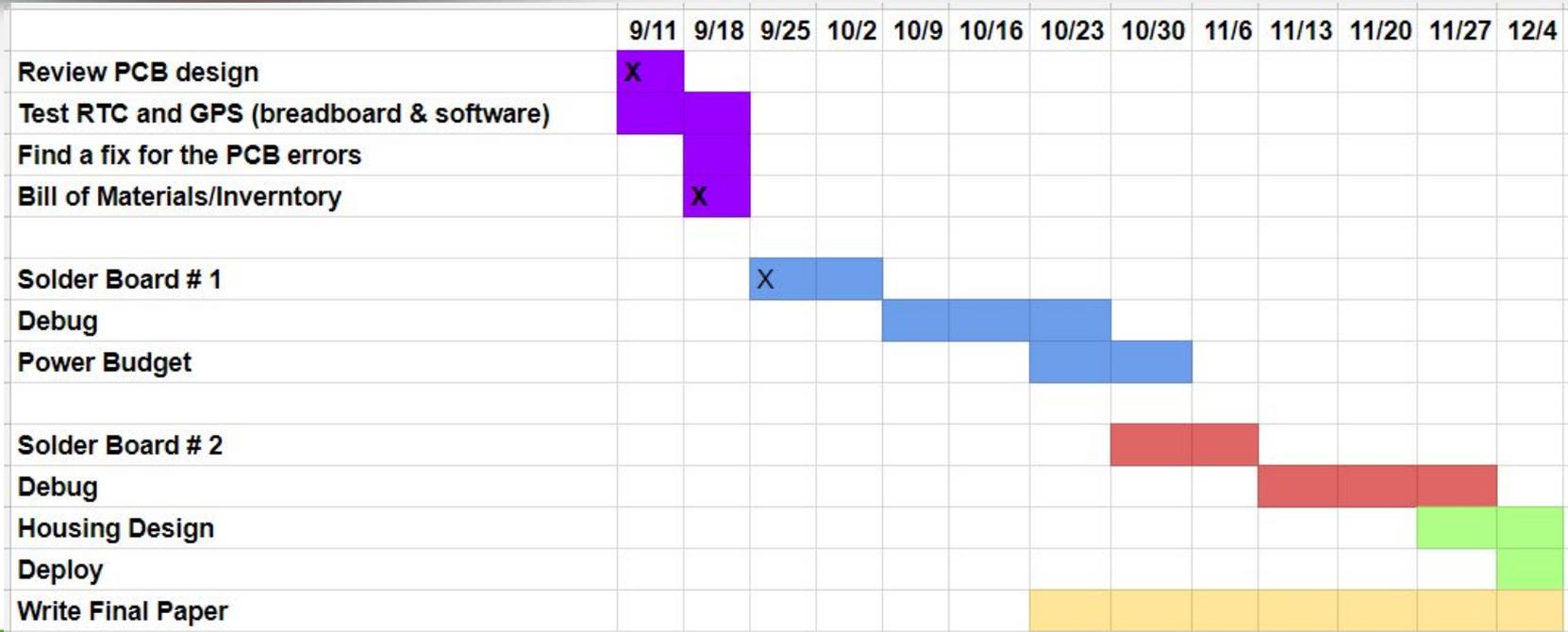


Semester Goals

- Finish 2 Cranberry 4.0 weatherboxes
 - Populate, test, debug
 - 1 - Software
 - 1 - Deploy
- Improve housing design
- If time: debug Cranberry 3.5



Gantt Chart



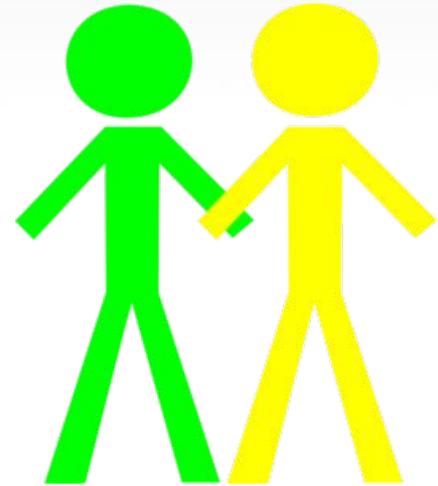
Team Progress

- Reviewed board design
- Completed the BoM & Inventory
- Began soldering boards (1 board each)
- Found a PCB error
 - Vcc not attached to solar panel

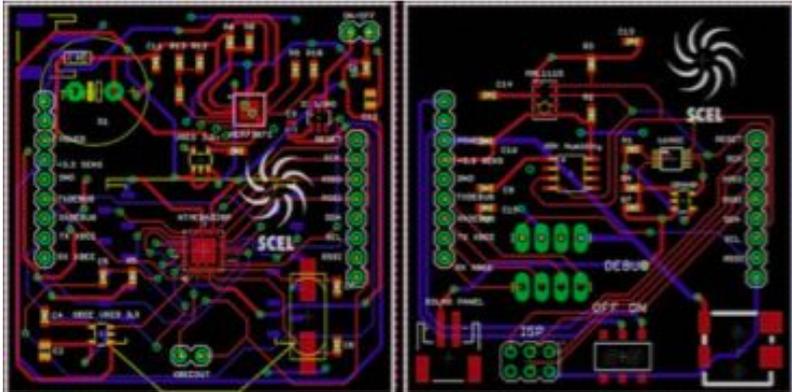


Learning Expectations

- Improve soldering skills
- Improve debugging skills
- Learn about firmware & testing



Potential Problems



- Design mistakes
 - Vcc not attached to solar panel
- Soldering small components



Any
Questions?

