Hardware: Andrew Gates

- Completed – Reagan has continued working on the PCB and as soon as we have a working demo that we feel confident in we will order it. From last week I had a bit of an issue with ordering the wrong parts, but Reagan had surface mount ones that we were able to use, and I was able to get my replacements in quickly. So I was still able to continue testing various aspects of the full scale system as described from last week.
- To Do – Have a working demo set up for demo day that allows for different sensors to be plugged in and read. This will not include communication between the GUI and hardware yet, it will only work through manually modifying the sensor settings array.
- Noted Problems – There was an issue with the parts that I ordered. I ordered DIgital Multiplexers and not Analog Multiplexers. This set me back a few days but I am still on track for demo day so no mitigation plan is needed.

Hardware: Andrew Klonitsko

- Completed - Setup xml views for the android app.
- To Do - Make general layout for the android app
- Noted Problems - Getting the interface setup properly.

GUI/SG sensor: Reagan Stovall

- Completed - Update txt file and Run application from GUI
  - basic start - finish GUI for a temperature sensor and relay in Continuous Timing setup. Display page to print sensor values and hardware states.
  - Test the new ultrasonic sensors and implement code to display results for demonstration
- Notes --
  - Hard time interfacing with the AFE TI devices for measuring ultra-sonic waves in liquids. There's a lot with the data sheet so I'll keep working with it
- Next Week---
  - Measure the density of water with ultra sonic waves.
  - update First 5 GUI Pages with new design. When building the timing Page, I learned a fair bit and made a template so that all the pages will be uniform

- Mitigation Plan – N/A (On track so far)
- Spec Development – First draft completed, will update with changes as they are made.
- Test Plan – A portion of this was completed along with our spec development. A general outline is made and we will start updating it soon.

Automation Station

week starts on Saturday because we're evil

week: 15

Plan Duration | Actual Start | % Complete

ACTIVITY	PLANNED START WEEK	PLAN DURATION	ACTUAL START	ACTUAL DURATION	PERCENT COMPLETE
debug Sensor and add Calibration feature	11	3	12	8	80%
connect the Phone App to a MySQL server using the insstech server	13	2	13	2	100%
Build Basic GUI in python for Control Box	12	3	14	3	100%
Connect pi to phone app via wifi, send and receive data set	14	2	14	2	100%
Expand Pi GUI to include multiple sensor selections and power control selections.	15	1	14	1	100%
Expand Phone App Gui for retreiving current sensor and power states	15	2	16	2	30%
Design and build basic relay control	15	1	15	1	100%
Design and order PCB Protoype 1	15	1	15	2	50%
Test new waterproof Ultra Sonic Sensors with associated control board to see if applicable	16	1	16	2	10%
Expand Pi GUI to include time management	16	2	15	2	70%
Build and test 16 chanel mux with 12 bit ADC chip, propogation delay and any other observations	16	1	16	1	50%
Order and test GPIO expander	17	1	15	2	100%
Build Control Box ProtoType [16 sensors, 8 motor					0%