Senior Design Smart Cooler

Week 1 Aug 24 - Aug 30

Progress made during the break

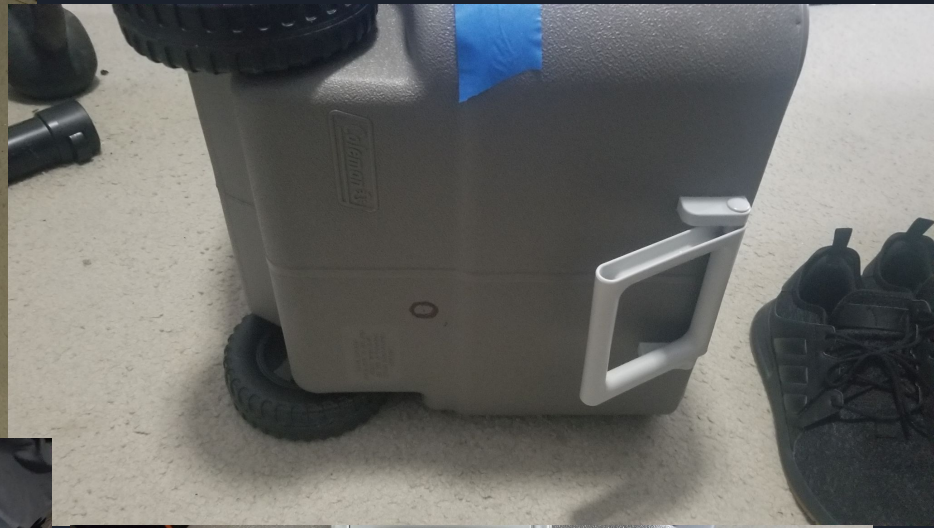
- Large majority of parts were ordered
- Test equipment bought
- Setup work space
- Fabrication begun
- Mobile Application construction started

Fabrication

Over the break while we were waiting for the components that were ordered to arrive, the first step was to disassemble the cooler that was going to be our shell.

With the parts in hand we able to decide on the placement of several of the major external components, the speakers, wired charging for devices, as well as the 12V charging option for the battery.


PYLE
PYLE


Coleman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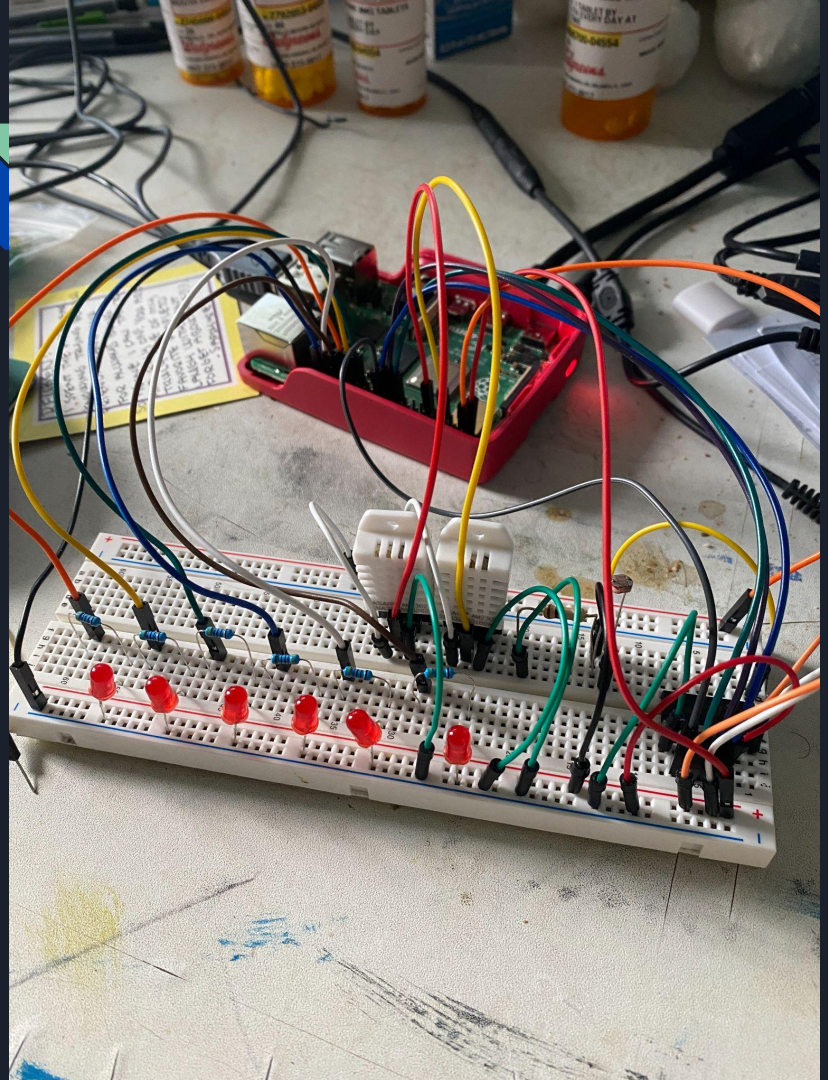
Mobile App Progress

Can scan for Bluetooth devices

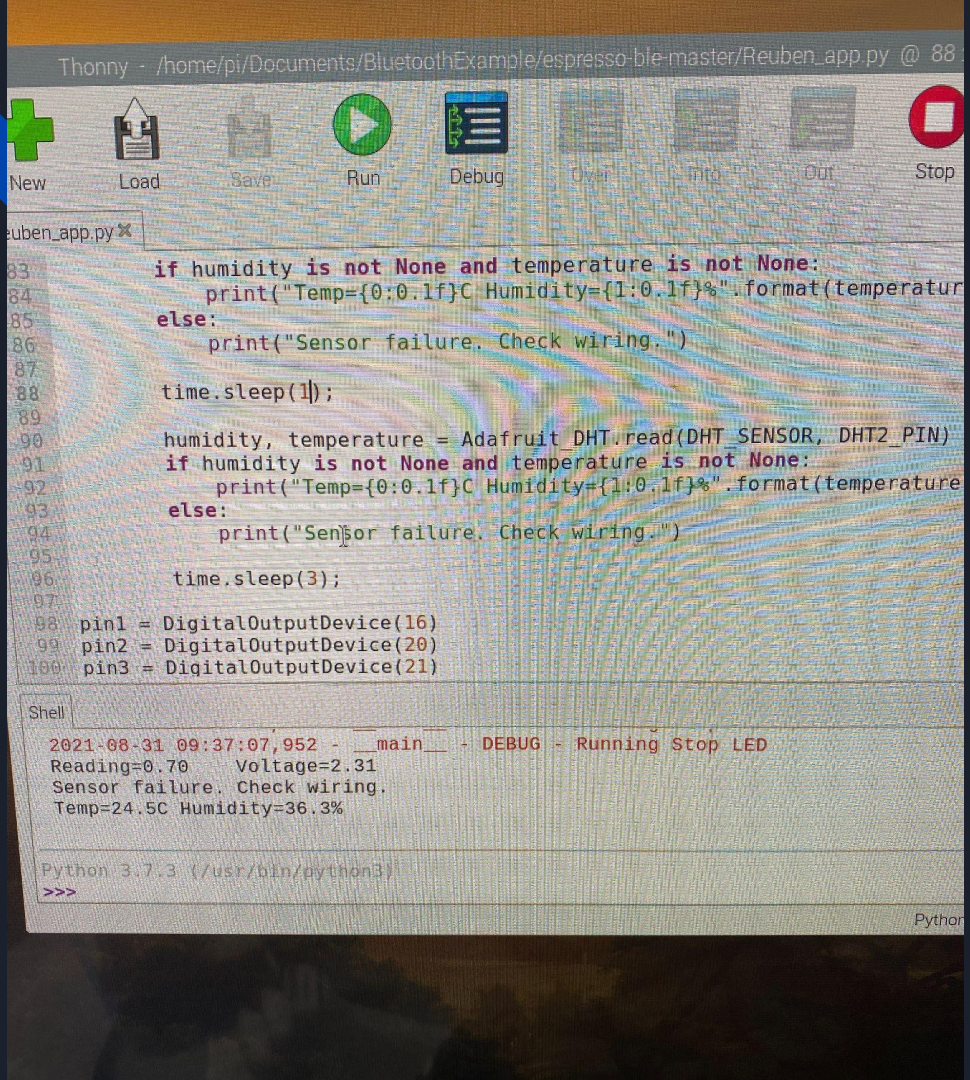
Connects and can read and write to device characteristics

(Characteristic for sensors, devices, any information that needs to be send to the raspberry pi as a base64 encoded string)



Mobile app and raspberry pi can turn on and off 6 LEDs, and read the data from two temperature sensors and a photoresistor.

The GPS module, RFID, and servo controller still need to be added to the raspberry pi.



The screen shows the console output of the photosensor reading and temperature sensor readings.

Goals for next week

Here are the priorities for next week:

- Continue to update Webpage
- Update Block diagram
- Update Power budget
- Begin wiring
- Discuss and Finalize part substitutions