

# Senior Design Smart Cooler

Week 5 Sep 21- Sep 27



# Progress made during the week

- Amp and Speakers were tested
- Raspberry Pi was attempted to run off 12V batteries
- Mobile app redesign progress



# Speaker Wiring





## Speakers Working

The best thing about these speakers is the light up blue during operation which makes it very clear when they are powered.





# Overall Functionality

Powering all the systems we have off the batteries and confirming operation





#### Scanning for Smart Cooler Screen

- The screen starts by scanning for The Smart Cooler UUID
- The gif in the middle is animated to show progress is happening
- Once connected, the app automatically transitions to the next screen



4:22

Scanning...



#### Connect to Device Screen

- In this screen, The Smart Cooler has been found.
- To connect to the device, the bottom button allows for connection to be made.
- The middle image is placeholder.



4:22

Connect



#### Connected Screen

- Once connected, different settings are shown.
- Switches are used to turn features on and off.
- The app retrieves temperature data and displays it in real time.
- The GPS location view will go to a separate screen to show location on google maps.
- The option to disconnect is at the bottom.

1:23	ul 🗟 🔲
The Smart Co	ooler
Speakers	
LED Lights	
Lock	
GPS	

4:23

Temp 1 Unit	27.9 C

Temp 2 Unit **28.2 C** 

GPS Location View

#### Disconnect



### Goals for next week

Here are the priorities for next week:

- Wire Solar panel and confirm charging
- Final fit for Speakers
- Secure Batteries and Solar Panel
- Read sensor data to app
- Get GPS position displaying on appDisplay GPS location in google maps
- Get setting screen working
- Get RFID working