

Dear Kristian,

The following is the status report for JnJ's Clockwork:

### **Physical Format**

The product will take on a box form factor in the end as it is supposed to replicate an alarm clock that would be on a typical nightstand. Current dimensions are still unknown.

### **Recent and Current Progress**

Johnson

Attempted to connect the temperature sensor to the database. I have proper C code working however in order to simplify things, I am trying to get python code to upload to the database. While also displaying a real-time clock on the 7-Segment sensor.

Jordan

Worked with the amplifier and speaker, managed to produce white noise, and is now working on emitting an alarm sound.

Juan

Soldered all the sensors, and has completed all designs for the fritzing diagram. His next step is to print out the PCB, solder, and test it with all connected sensors. Once that is complete, he can move onto creating the casing for the combined hardware.

### **Problems and Hyperlinks**

One issue occurred when testing the 7-Segment display, we learned that the display can only take in 3.3 v rather than 5v. Because of this the original display screen was short-circuited and a new one had to be purchased. An issue that was discovered with the raspberry pi was it required an amplifier and a speaker in order to emit sound.

### **Financial**

The price for the 2 display screens we recently purchased are as follows:

I2S 3W Class D Amplifier Breakout MAX98357- \$7.83 CAD

Speaker 3" Diameter 8 Ohm 1 Watt - \$2.57 CAD

1.2" 4-Digit 7-Segment display - \$24.93 CAD

More components may be purchased in the future depending on current circumstances.