

Dear Kristian,

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

### **Hardware Present**

Humidity and Haptic sensors accounted for and ready for integration. The Raspberry Pi 3 B+ is fully operational with a healthy amount of storage in the SD card.

### **Physical Format**

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

### **Recent and Current Progress**

Johnson

Fixed few bugs in the application that were still present from last semester. Currently researching how to integrate bluetooth connectivity with the Hardware portion.

Jordan

Recently purchased 2 display screens which we plan on using for the Hardware, 20×4 RGB Backlit LCD display and 1.2" 4-Digit 7-Segment display. When the products arrive, Jordan will start to work on how to integrate them with the other sensors.

Juan

Created rough schematic and layout for how the hardware device should appear and function. Assisted Johnson in fixing database errors from last semester in the application. Next step is to design the internal layout of the project to determine locations for sensors and wiring.

### **Problems and Hyperlinks**

Some problems we have encountered has to deal with the application itself in terms of how to actually display what we want to the screens purchased. Johnson and I are not quite sure what code to implement that would allow such a process to occur. Research is still ongoing so that once the displays arrive, we may attempt a few theories we currently have.

### **Financial**

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

20×4 RGB Backlit LCD - \$32.83 CAD

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

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

