

## **Status Update: Phase 3**

**Team:** Sun Emojis

**Members:** Jake Mingolla, Melissa Blotner, Reema Al-Marzoog, Eliza Schreibman

### **Work completed:**

- iOS app UI improvements
  - Reema and Melissa
- PCB soldering
  - Eliza
- Digital model of device and laser cut model
  - Jake

### **How does the work you got done compare to the goals you outlined in your Project Proposal for this phase:**

- We shifted from using an armband to designing the device so that the user can clip the device anywhere they'd like.
- We're also using only one button instead of the two we said we were going to use in the proposal to simplify interaction with the device.
- We simplified the interface for the device, showing just the countdown to focus on the most important information the user needs.
- We also removed the haptic feedback because we had an issue with powering the device.

### **What is working as expected? If anything is not working as you had hoped, what do you plan to do in order to fix it?**

The laser printing turned out well and will fit all of our components nicely. We had issues powering the device on just 3V, so we had to remove the haptic feedback. We've also had some issues soldering that are being resolved. We've also been unable to find screws small enough to attach the plastic layers of our device, but we have some workarounds in mind. One possibility is to use putty to attach the layers.

### **Testing:**

- We made incremental changes and tested along the way.

### **Directions:**

- If you're using a Bean that doesn't already have the sketch loaded onto it, load the sketch to the Bean.
- To test the app, have it downloaded onto your phone and (within the app) bluetooth pair it with the bean.
- To test it, expose the breadboard to different levels of sunlight and notice changes in the UV values measured. The screen should also be displaying sample information.
- The screen timer can be reset by pressing the yellow button or through the app.

- You will need to download the U8GLib in order to use the screen.
- <https://github.com/olikraus/u8glib>