

## **Team F02**

**Name: Jiahui Chen**

**David Yassine**

**Harsh Bhasin**

**Josh Burelle**

**Mohammad Obead**

## **Future Prototype Progression**

### The Code and LEDs

In terms of the LEDs we took more of a focused prototype approach from Deliverable G and it's a good thing we did because we immediately ran into an issue with the code and staying within the budget for the RGB LEDs. So how are we going to overcome our problem? We had a meeting and decided to scrap the expensive multicoloured RGB LED strips and replacing them with a more cheap single coloured LED design and code it where the LEDs would turn on when detecting a heat signature, and off when it does not. This may not seem like an exciting comprehensive design but we figured this is the best thing for the project considering equilibrium has sensors that are not working and the design is never on while an ugly frame is holding on to it. Our design will revitalize the sensor functionality, Improve the visual design of equilibrium with a clean flush dark reflection of LEDs and Equilibriums sculpture going on forever, and this will make the design more green by turning on when it needs to be admired and off when its not being viewed. We plan to go forward with this prototype in a more comprehensive fashion by getting the ok from our TAs to buy the new LEDs and test if our code will work on them and make sure our more comprehensive LED design will work when we solder all the LEDs together and to the arduino. We also have to test to make sure the circuitry will accommodate the load we are putting on it.

#### **Materials:**

- Arduino board and USB ~ \$25
- 2 IR sensors ~ \$12
- 200 single colour LEDs ~ \$15

### Our Infinity mirror

For our next step we plan to jump immediately into a comprehensive design because of our precise and well thought out blueprint prototype in deliverable F. Our comprehensive design must be completed after our code and LEDs work so that once its assembled we won't encounter any problems and have to disassemble the whole mirror. So far we have the frame prepared and once we have everything prepared and well tested in both our prototypes, if we

have time we can experiment to see what else we can do with the arduino if we could add to the design.

**Material:**

- Tint film ~ \$16
- Frame ~ \$16

New Total

= \$84 Within budget!

