**Lumi Progress Report**

During the hardware assembly of the sensors and with feedback from Leon King and David Neumann, I opted to focus on the 3 major sensors pivotal for Lumi functionality: Neopixel Ring, Sound Sensor, Light Sensor. These sensors best work in concert with one another. However, I do plan to still attempting to add in the other sensors if time and hardware deem appropriate.

Recently completed activities:

**Build Video Script**  Completed in 6 days

**Build Video Completed**  Completed in 20 days

**Hardware Assembly of Sensors** Completed in 6 days

**Progress Report**  Completed in 6 days for 12/22/2017 milestone

Progress Remaining:

**Production Testing (*In Progress*)** Completed by 01/05/2017 14 days

**PowerPoint Presentation** Completed by 01/12/2017 7 days

**Lumi Build Instructions**  Completed by 01/19/2017 7 days

**Obstacles Encountered and Planned Solutions**

Through the production of Lumi and the use of the Raspberry Pi, I have reached certain limitations that prevents me from adding all 5 of planned sensors to the board. I opted to eliminate the Fingerprint Scanner and the Proximity Sensor for the time being. Leon King expressed an immediacy in cutting sensors to have a complete project in time. David Neumann showed a lack of interest to the Fingerprint scanner. Also, the fingerprint scanner I purchased doesn’t fit intuitively to the Raspberry Pi without heavy modifications to the current build. Finally, the Lumi shell casing that was shown to us via Neumann’s prototype is too small to house our components. Through dialogue with David, we opted to plan a new printout of 200-300% the original size.

**Financial Update**

A total of 6 items were purchased for a total of $172.31 and has not deviated from the existing budget.

* Proximity Sensor
* Neopixel Ring
* Fingerprint Reader
* Sound Sensor
* Light Sensor
* Raspberry Pi 3

**External Publications**

Lumi is currently still a pet project through a collaboration with David Neumann’s team and our Computer Engineering team and hence no publications, promotional materials, or reports have arisen from the project. I plan to speak with David to see whether promotional publications would deem a good fit moving forward.