RFID Sensor Progress Report – Week 10

*Description*

The RFID sensor will be used to trigger the RGB lighting when the tag is within the proximity range. It will be able detect different data depending on the tag and whether it is in range or not.

*Objective Progress*

The process of the project is minorly under schedule, but has room to improve and catch up onto the project. With the neopixel ring working and running, the proximity sensor should be ready to code soon.

*Problems/Opportunities*

An issue that has been found was detecting the card/tag on the RFID sensor. Using a guide, the RFID sensor inputs were placed in the correct GPIOs. The .py file used to test functionality was also working but the actual sensor did not read. After reading some forums on the RFID, an issue was claimed that users need to include a line of code indicating the version of the spi-bcm. After writing it into ~/boot/config.txt, the RFID was able to read both the tag and card. Although this issue was resolved, I’ve noticed the RFID sensor was not soldered properly, this prevented the sensor from reading the tag properly, causing a big issue. In the near future, this shall be fixed with better soldering.

As part of the Project Lumi Light, some sensors are needed to be cut down and potentially, the RFID might be eliminated from the lists of sensors being used.

*Financial Updates*

As of the week 4 budget plan, no purchases have been made in correlation to the RFID sensor. However, the LCD module display will no longer be used for Lumi. Additionally, recent purchases for Lumi were the neopixel ring, a microphone sensor, and necessary parts used to build the Lumi Light. (Coming up to $34.31)

*Repositories Used*

RFID –

<https://github.com/mxgxw/MFRC522-python>

<https://github.com/pimylifeup/MFRC522-python> (Modified repository with extra .py files)

<https://github.com/lthiery/SPI-Py>

NeoPixel –

<https://github.com/jgarff/rpi_ws281x>