# **MEMORANDUM**

TO: Professor Healy

FROM: Zak Rowland

DATE: 1-30-20

SUBJECT: "Weekly Status Memo"

### **Problems**

We don't have any major problems at this time. A problem we had during lab time was Hayden tried soldering headers to a protoboard to house the shift register, however the connection turned out to be loose. So, when we moved everything over to a breadboard it worked as intended.

## **Progress**

This week, Hayden and I focused on integrating the motion sensors with the LEDs via the shift registers. The integration was straight forward, however the loose connection made us think the code was at fault, so we spent a lot of time debugging. James continued work on the website and implemented dropdowns to see the different options for each room, however these options don't change anything yet. Javascript can't be used on Arduino so it makes website building more challenging. James also implemented the ability to view the different time blocks depending on the URL. Beto continued developing code for the RGB LEDs.

#### **Discussion**

We should discuss with James about how he feels about the progress on the website. If he feels that he won't be able to finish in time, we need to focus on helping him. However, it seems that he is making good progress every week so I am unsure if this will even be an issue.

## **Next steps**

Next week, we plan to try daisy-chaining some shift registers together to control the RGB LEDs. Depending on how this turns out, we may begin thinking about how the website will interface with the LEDs. We also learned from example circuits online that we should also use a capacitor between power and ground to filter power fluctuations.