

Biweekly Status Report #5

Group sdmay20-31

## AUTOMATIC TRACKING OF ACTORS WITH INTELLIGENT THEATRICAL LIGHTING SYSTEMS

### **Week Summary:**

The last few weeks started with Spring break which we stopped working on the project. Since then, the school switched to virtual learning, which made it so difficult to make progress in our project. We had an update for our project expectations that was proposed by the client (Story Theater Company) and our advisor (Dr. Waymore).

### **Past week accomplishments:**

- Update the project expectations to meet the current crisis with the COVID-19.
- Having the spotlight system working more accurately for the coordinate of the muck data.
- Having the tracking system working and the boards fully functioning.

### **Advisor Weekly Meeting:**

During this week's meeting, we identified to our advisor the problem of us not being able to meet because of the social distancing. He basically gave us an approval on the movement of the spotlight system that it is working perfectly. However, one of the boards for the tracking system got broken again, which made it difficult to make progress on that end. He tasked us to try and run the system with only 2 anchors and 1 tag, we are still trying to see if that is a possibility. Overall, we basically reached the endpoint given our limited access to work together and to all other materials.

### **Individual contributions:**

- **Raed Albloushy** : Read has been working on the boards trying to get them to work as 2 anchors and one tag and see if that would compile with the code provided for the PCBs.
- **Hassan Alhaddad & Mouz Zayed**: We had the boards needing to be flashed again since we are changing the function of the boards between anchors and tags, so they have been working separately to solder the boards to reflash them accordingly.

- **Joel Ohge & Hassan Almohammedsaleh** : Since the project has been stopped under the current conditions, Hassan and Joel have been working on documentation for the project and monitoring any progress from others. Joel also worked on refactoring the spotlight control code and by making comments removing excess code and making needed helper functions.

Weekly issues:

- We had one of the boards broken, which is too late to order a new board and ship it overseas, so we are trying to work it as 2 anchors and one tag
- We cannot meet as a group anymore to work on the project, so we had lowered our expectations for the project and working on new deliverables.

| Name                   | Individual Contributions              | Hours this week | Hours cumulative |
|------------------------|---------------------------------------|-----------------|------------------|
| Joel Ohge              | Spotlight Programming And Testing     | 5               | 53               |
| Hassan Alhaddad        | Soldering and fixing the broken board | 3               | 51               |
| Hassan Almohammedsaleh | Software analyzation/ synthesis       | 5               | 53               |
| Raed Abloushy          | Flashing localinos and system setup   | 10              | 58               |
| Mouez Zayed            | Soldering<br>Flashing localinos       | 3               | 51               |

Plans for the upcoming week:

- Having a working system that could at least give us an (x, y) coordinations from the localino system with only 2 anchors and 1 tag.

- If done, trying to transmit data to the DMX protocol.