Weekly Status Report #1

Group sdmay20-31

## AUTOMATIC TRACKING OF ACTORS WITH INTELLIGENT THEATRICAL LIGHTING SYSTEMS

## **Week Summary:**

We met with our advisor Dr. Mat Wymore and our client Mike Sulzberger from Story Theater Company and talked about different possible technologies we could consider making the tracking spotlight. We have scheduled a visit to Story Theater Company and went to see the environment that we will be working at. The visit was last Sunday Sep15th. We went out and saw the place and where we will be implementing our project.

After our visit, the team met to research and discuss the possible solutions that we could propose to the problem. Also, the team has pursued to see which is the most cost efficient and cost effective. We are considering two main technologies to track the actor: the first is to use open source computer vision (openCV) to track the position of an actor with a camera. The second method would be to use an RF transmitter that the actor would wear with tracking antenna around the stage to track the position of the actor. Both possible tracking methods would connect to an application that would be able to control the movement of the spotlight.

## **Weekly Accomplishments:**

- We have visited the site where the project would be installed and got a better idea of our requirement
- We started brainstorming and researching the solutions for the given problem

| Name                      | Individual<br>Contribution | Hours of work this week | Hours Cumulative |
|---------------------------|----------------------------|-------------------------|------------------|
| Hassan<br>Almohammedsaleh | Actor<br>Tracking          | 6                       | 6                |
| Joel Ohge                 | Spotlight Movement         | 6                       | 6                |
| Hassan Alhaddad           | Actor<br>Tracking          | 6                       | 6                |
| Raed Albloushy            | Spotlight<br>Movement      | 6                       | 6                |
| Mouez Zayed               | Actor<br>Tracking          | 6                       | 6                |

## Plans for the upcoming week:

- Research in depth the suggested solutions.
- Discuss possible solutions with the client.