

MST Google Project 2 – 11/12/15

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Overview of previous weeks

During the last two weeks leading up to the deadline most of the time was spent fine tuning different aspects of the app: transferring data and setting up a server, creating and displaying graphs, designing an appealing Cardboard view, and adding video footage to the view.

Important decisions were made on what tools and software were best fitted for our application (Bluetooth for the server, OpenGL ES for the graphs), and steady progress was achieved. By the deadline we were able to deliver a first proof of concept that we are very satisfied with.

Meetings

3/12/15: Update on the project with Aron (TA). We covered what we will be able to deliver for the deadline and if it meant the requirements and scope we had agreed on for this phase of the project. Assigned tasks for website and video documentation.

10/12/15: Meeting to finalize the project, with Aron (TA). We discussed analyzing video footage of an aerial view of a crowd where we tracked individuals, and went over the last requirements for the deadline.

Tasks completed and time estimate

Through out the last two weeks before the deadline, the time was spent finalizing the app and creating an appealing UI in the Google Cardboard. Aspects that were finalized are:

- Bluetooth for data transfer
- Creating graphs using OpenGL ES
- Creating the Cardboard view and main menu with graph and video footage

In the end we were able to deliver a functioning prototype following our requirements.

Plan for the upcoming weeks

Now that phase 1 of the project is done we have a new set of requirements to focus on which include the video footage, video analysis, and sensor readings. Our first task will be to build the drone with the sensors and go-pro, and take it for test flights. This way we can start working on transferring the sensor readings to the phone and laptop using our server, and get live video footage on the Cardboard.

Carla Hyenne

Over the last two weeks before the deadline for phase 1, I worked on creating graphs using OpenGL ES. Garrett followed up by implementing them in the Cardboard main menu view, adding a timer to graph data in real time. During the last week, the focus was on completing website documentation and making the video. My part consisted of designing the website and creating diagrams for our multiple prototypes.

Daniel Eldar

During the first week, I was looking further into Bluetooth connections and whether it would be suitable to send the amount of data that we want to send across which were the sensor and video data. After the research it looked very feasible to send that amount of data over the bluetooth connection. During the second week, as the deadline approached, we planned out the video and completed all of the documentation that was needed for the deadline on the website. We also completed the graphs and video display on the google cardboard, however, it doesn't connect to the laptop yet for retrieval of data.