MST Google Project 2 – 29/01/16

Daniel Eldar, Carla Hyenne

Overview of previous weeks

This is the start of the second phase of our project for Systems Engineering. Over the last two weeks we have had two initial meetings during which we designed our plan of action for now up until the end of the project in April.

The elevator pitch delivered to the clients provided the background of our project, how it will help solve issues in different fields, what functionalities it currently has and how we are working to improve the features and implement new ones to perfect the proof of concept.

Meetings

19/01/16
Attendees:

        Garrett May

        Hekla Helgadottir

        Carla Hyenne

        Daniel Eldar

Points discussed:

        Setting a timetable for upcoming weeks

        Outlining tasks needing to be complete

26/01/16
Attendees:

        Garrett May

        Hekla Helgadottir

        Carla Hyenne

        Daniel Eldar

        Aron Monszpart (Teaching Assistant)

Points discussed:

        Delegation of tasks between team members

Tasks completed and time estimate

As this is the start of the second phase for the project, we have listed all the functionalities we have left to implement for the final proof of concept. These include:

– Attaching the hardware to the drone (sensors, microcontroller, telemetry, gimbal, camera)
– Implementing the network for transfer of data (including sensor data and video footage) from the drone to the backend, and tying it into the transfer between two devices
– Reading and interpreting the data collected, and rendering it on the graphs
– Implementing the functionality of moving the gimbal from the Google Cardboard
– Using data and machine visualization to analyze video footage
– Improving the user experience with an aesthetically pleasing interface inside the Google Cardboard view

Plan for the upcoming weeks

Our team has divided the tasks to ensure all is covered within the time limitations.
Team 1 (Garrett May and Hekla Helgadottir) will be focusing on receiving and interpreting sensor readings, and implementing the gimbal functionality.
Team 2 (Carla Hyenne and Daniel Eldar) will be focusing on transferring data from the drone to the backend as well as the analysis of videos.

We have an upcoming meeting with our clients, notably Usama Inam from Google and Dr. Kostkova. The aim of this meeting is to present our outline for the project and the functionalities we will be focusing on to ensure that it meets their requirements and that they are satisfied with the goal we have set ourselves as the outcome for the project.

Work Packages

In the upcoming weeks we will be working on two aspects of the project: Carla will be focused on analyzing video footage and using machine visualization to enhance the user experience. Daniel will be working on the transfer of data from the drone to the backend, more specifically on the transfer of video footage across radio waves.