

PROJECT 10 – ORANGE LABS SENSORS API

Group Members

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Overview

As of 28th November, attempts to get into contact with the client again regarding general issues found with the selected use case have been made. A response was received this week and we hope to secure a meeting with them in the upcoming week. In these past two weeks, more research, this time into the agreed use case has been carried out. A general schedule of work for us to complete, some hashing out of requirements and a look into the actual UI the system we are building would support was carried out as well.

Summary of progress so far

- Carried out more research around the use case agreed upon. General research occurred around finding any existing systems, hardware and sensors being used for smart parking or other phone applications that were similar to the use case.
- Compiled a general set of possible system requirements
- Had a team meeting on the 21st November to discuss research done & any issues
- Contacted client again regarding issues found. Respond received. Meeting date pending.
- Compiled a general schedule of work to be carried out before the December 17th Deadline
- Had another team meeting on 28th November regarding UI and how to progress in with this

Summary of meetings

Friday 21st November – Progress into Research & Potential issues

Location: 4th floor MPEB

Time: 4.30pm – 5.15pm

Attendees/ Absentees: Johan, Gulliver, Victoria / None

This was a general catch-up meeting to discuss what had been done by everyone in the team so far. Ideas for how the general network of sensors would be connected to create a system were run through on the whiteboard. Research into parking solutions / the use case was then discussed. Some concerns regarding one existing parking solution, SmartPark “SmartEye” found which was strikingly similar to what the client said they expected from us by April were brought up. It was resolved that the client would be emailed regarding this.

Friday 28st November – Possible UIs & Where next

Location: Labs 4.06, MPEB

Time: 2.45pm – 3.45pm

Attendees/ Absentees: Johan, Gulliver, Victoria / None

The first quarter of this meeting involved conversing with our lecturer on some queries we had on a few of the things due for the December 17th Deadline. In particular, whether the lack of hardware to create prototypes at the moment was going to be an issue and the kind of UI expected of us given our project deals mostly with low-level infrastructure and whether this was still needed given it is not included in our client’s expectations of the project were discussed. A conclusion that a UI is

indeed still something we need to include was made. To conclude, some pieces of advice to note: do not confuse simplicity for usability when thinking of UI. A user interface does not need to be graphical either. Mock or simulating the hardware instead is fine enough to start on creating the software side.

Potential UIs for the system we will build a concept for were then discussed. Three potential UIs were discussed. These include:

- A mobile application which has the main feature of notification & potentially search for drivers
- An application/administration system which has the main aim of monitoring the sensor network for a network/ construction manager and team
- A set of APIs which has the main aim of providing a set of available functions for developers to use to develop applications based on data from the sensor network

To wrap up, discussion on what to do next and assigning these tasks occurred.

Next Report Actions

JOHAN

The past two weeks I have been looking into our chosen use case and more specifically on the existing product that is similar to our use case. I did some research into how the system works and then came up with ways to expand on this.

Over the next two weeks I will be planning out an idea for an expansion of the project, which involves using more than one sensor to detect if a car is parked properly inside a bay. I will also build an experiment prototype of a devices gathering sensor data and sending it to a remote location (my computer). I will also help to finish off content for the website and the video.

GULLIVER

Over the next two weeks I plan to assist both Victoria and Johan, working partly to develop system designs at a higher level but primarily looking at lower-level implementation details.

This will include experimentation with the capabilities of the Raspberry Pi and its compatibility with Java. The project's documentation also needs to be reviewed and collated, and I'll be sharing the workload with Victoria whilst also working on developing the project website.

VICTORIA

Previously, I have carried out research around the use case and began compiling some of the documentation for the website. I have also worked together with Johan to compile a general schedule for the team and with Gulliver to compile information on all use cases for the website.

In the upcoming weeks, I plan to look further into the given use case to derive high-level sub cases of illegal parking that could be looked into and how implementation for these would work. This would involve further research into possible sensors and hardware which could be used for these. I also plan to jointly collate and review all documentation thus far with Gulliver, assist Johan where possible and generally help with the website's further development.