Net-a-Porter VR Project

Bi-weekly Report 2
28 October 2016
Group Members: Vania D. Gunawan Setiono (Team Leader), Haran Anand, Yll Kelani

Overview

We agreed our requirements with the client. We spent time learning how to use Unity and develop for the Hololens. We started the project website.

Summary of Meetings

Meeting 1 (Thursday, 6 October 2016)
Attendees: Vania D. Gunawan Setiono, Haran Anand, Yll Kelani
Location: MPEB Labs

We came together to work on the HoloLens with each other. We went through tutorials and learnt more about the development process and how the HoloLens works itself. We made a list of requirements from the project brief. We informally discussed how certain features would work within the HoloLens and then edited the requirements where we saw fit.

Meeting 2 (Monday, 10 October 2016)
Attendees: Vania D. Gunawan Setiono, Haran Anand, Yll Kelani, Net-a-Porter Client
Location: Net-a-Porter Office

We met with our client representatives: Irina and Robin. We had a proper discussion regarding the project brief that UCL finally assigned to us. They told us how they envisioned the project in more detail; we thought about how we wanted to do it considering the technology available (HoloLens) and discussed how much they were willing to mould their brief around our first ideas. We then confirmed our requirements with the client.

Meeting 3 (Friday, 21 October 2016)
Attendees: Vania D. Gunawan Setiono, Haran Anand, Yll Kelani, Net-a-Porter Client
Location: Cruciform

We had a Skype meeting with our client after talking with our TA about the project. We asked about more specific details like scanning clothes in 3D, certain features such as product recommendations and how they would be linked to their website.

Meeting 4 (Thursday, 27 October 2016)
Attendees: Vania D. Gunawan Setiono, Haran Anand, Yll Kelani
Location: MPEB labs

We deployed the Unity projects that we worked on at home on the Hololens. We also asked the TA about how we should 3D scan the clothings and he showed us some research papers on RGBD cameras, 3D scanning, depth sensors.

Tasks Completed

- Agreed with the client on a final list of requirements
- Developed sample projects
- Tested some projects on the emulator and the Hololens
- Researched about 3D scanning and depth sensors to import the clothing into a 3D model for the Hololens
- Created the group website

Problems

We faced some problems in launching the emulator for the first time but we resolved the problems by configuring some system settings and upgrading the RAM to accommodate for the emulator. It was also still unclear about what exactly the client expects from us, whether they want an avatar in virtual reality or if we can do it in augmented reality by displaying the clothing on the user's body. We had a Skype meeting with the client to clarify this and settled on a fixed set of requirements.

Next Steps

For our next steps, we plan on working on the website and fill in the contents of each page, then set it up on the UCL CS server. We will also research more about depth cameras and 3D scanning to figure out how to replicate the texture, shape and dimensions of the clothing in virtual reality. We will also start initial project trials on the Hololens to be able to learn more about it and develop the project.

Individual Contribution

Vania D Gunawan Setiono

During the last two weeks, I have been getting in touch with the client in order to finalize the project requirements. I downloaded Unity, Visual Studio and the Hololens emulator and went through the Hololens tutorial on Microsoft's website to get an idea of how to develop programs for Hololens and the features that we can utilise for our project. After doing the tutorials and testing the sample projects on the emulator, I also deployed it on the Hololens in the labs. Additionally, I started making the template for the group website with the layout and the content of the home page.

Haran Anand

This last fortnight has been extremely productive in terms of progress. After finalising which project that we were assigned to and working out some basic requirements, I started installing some of the software required to develop and use the Hololens. By chance, Microsoft had a whole page of step by step tutorials regarding how to develop for the Hololens using Unity, which are extremely helpful and I have been going through them and testing them on the Hololens Emulator and we actually got to test them out on the actual Hololens in the lab session.

Yll Kelani

Over the last two weeks, I clarified the challenges likely to arise in the project with both the client and our TA. I sideloaded Windows on my MacBook and set up all the required technologies to develop for

the HoloLens. I did tutorials to relearn how to use Unity and find the nuances of using Unity to develop for the Hololens. I used the HoloLens in the labs when we could get ahold of it to work out what was the bes t way to test experiments. I started working on setting up the project website.