Net-a-Porter VR Project

Bi-weekly Report 7 10 February 2017

Group Members: Vania D. Gunawan Setiono (Team Leader), Haran Anand, Yll Kelani

Overview

Over the last two weeks, we outlined and delegated tasks towards the different facets of our project. We need to continue to work on these delegated tasks over the course of reading week, as they are moreorless tasks that can be done individually. As well as this, together we worked on scanning the garments provided to us by Net-a-Porter, to varying degrees of success. These will have to be continued after reading week, if we don't have access to the MPEB labs.

Summary of Meetings

Meeting 1 (Monday 30th January)

Attendees: Vania D. Gunawan Setiono, Haran Anand, Yll Kelani, Client

Location: Meeting over the phone

After the previous two weeks in which we clarified our project and started to scan the clothing for Net-a-Porter, we decided to have a discussion about how we were going to progress with the project by delegating roles. Our ultimate choice was that I would focus on mapping clothes to the avatar, Vania would focus on implementing gesture functionalities such as rotation and placing and Yll would focus on creating and dynamically sizing the avatar.

Meeting 2 (Tuesday 31st January)

Attendees: Vania D. Gunawan Setiono, Haran Anand, Yll Kelani, Dr. Harry Strange, other NAP teams Location: MPEB 1.21

The day after our phone meeting, we met again during the labs to clarify our delegated roles, which was helpful as we went a bit further into depth regarding, the specific tasks we

would do first. During the second half of the session, we went to go and see Dr Philip Treleaven and his colleague Andrew to double check whether the garments would actually fit on the mannequins that were available to the department. This was actually very helpful as we found out some of the garments did not found so we attempted to make arrangements with Irina at Net-a-Porter.

Meeting 3 (Thursday 2nd February)

Attendees: Vania D. Gunawan Setiono, Haran Anand, Yll Kelani

Location: Dr Philip Treleaven's Office

After realising that we would have to bring an iron next time we came to do the scans, we decided to scan the dress, which seemed largely unaffected by being folded. Upon our first scan we realised that there were actually other factors that could affect our scan that we hadn't realised before such as the length of the garment as we had to move the scanner up and down to include the whole dress. With this

in mind it took a few tries to get something close to even resembling a dress. Our proposed solution is to use some sort of studio, which we are currently trying to arrange.

Meeting 4 (Friday 10th February)

Attendees: Vania D. Gunawan Setiono, Haran Anand, Yll K elani

Location: Birkbeck B35

We met briefly to discuss what our general plans were for reading week and arranged to have some Skype and physical meetings during the week.

Tasks Completed

- Successfully delegated roles for further progression of the project.
- Got some preliminary scans of the dress provided to us by Net-a-Porter
- Researched techniques for gesture control on the Hololens
- Thought of some potential applications of using a mirror with the app.

Problems

- Trying to increase the accuracy of the scans of the clothing
- Troubleshooting why walking around the garment in Unity doesn't work

Next Steps

During reading week, we are going to complete our individual tasks and by the end of the week, we will take what we've learned and combine the output of each team member into the project. We will also need help from Prof. Treleaven's colleague to set up the studio lighting for us to scan the clothings in a better quality. After the main functionality of the app is completed, we will start working on the UI.

Individual Contribution

Vania D Gunawan Setiono

Over the past two weeks, I have been experimenting with Unity and implementing the gesture functions on the Hololens. I used the Hololens Toolkit for Unity to create a package that can be reusable as the functionality of our application. This is useful as it contains Prefab assets (such as cursors with feedback that give feedback to users when their hand is detected in the ready stage). There are also C# scripts that animate the cursors and also provides the basic logic to show the cursor in the direction where the user is looking at. We can modify these scripts and assets according to the needs of our application. I

have also tested with the scenes in Unity. I will work on integrating the assets, scripts and scenes in the upcoming weeks.

Haran Anand

Over the past two weeks I have been largely researching how to map our scanned garments to body shapes. From what I have found this will be challenging but manageable so I intend to spend reading week working on this. As well as this I helped with scanning a garment provided by Net-a-Porter on one of the mannequins provided by Prof. Philip Treleaven and Andrew, after testing the fit of the garments on the same garments a few days prior. In addition to this, we had to go about finding a studio, so were instructed by Dr Philip Treleaven to contact someone who was involved with 3D videos at UCL in order to help with this.

Yll Kelani

In the past two weeks, I've helped scan clothes using one of Andrew's mannequins, looked at finding a studio in which to complete further scans of said clothes and I've looked at what we could map the 3D models of the clothes onto during development and when the application is finished. We used one of Andrew's mannequins to hold the clothing sent by Net-A-Porter while we scanned them. We found that scanning oddly sized and shaped clothing is more difficult than first thought. We spoke to Philip Treleaven and he suggested speaking to someone that could give us access to a studio. I've looked at generic 3D body models for use during development. I found these online for free. I need to explore options that easily allow us to resize the 3D body model as to fit different users.