BI-WEEKLY REPORT

TEAM 29: CESAR FERRADAS VEGA, DIANA IONESCU, THOMAS ESPACH

PROGRESS OVERVIEW

Successes/Progress:

- Resolved the differences between our project and the other VR team.
- Client has clearer idea of what we are developing.
- Setup development environment in all team member's laptops.
- Started development of recommendation engine.

Problems:

- Haptics requirement cannot be met.
- Lack of communication with client led to last minute changes.
- Limited machine learning support in Unity.

SUMMARY OF MEETINGS

Meeting 1: Meeting Client

Both teams that are develping apps for the HoloLens met with Irina at the YNAP main office. We explained our project, and Irina suggested to change it because of the similarities with the other team. She suggested looking into Haptics to try and have a project of our own right which could then also be merged with the others.

Meeting 2: Meeting Supervisor

Met with Harry Strange to discuss the overlap in the HoloLens applications. We considered the possibility of modifying our requirements to focus more towards a recommendation engine integrated into a mixed reality app. A Microsoft engineer was present in the meeting and recommended that due to the large amount of data required for the machine learning to be possible, we could aim to use the YNAP API to retrieve images and potentially process the images for use as textures on a 3D avatar for seeing the front. We established that the user could then be able to vary different elements of the outfit to their liking and potentially even save outfits they like to improve their user preferences.

Meeting 3: Skype Conference

Team meeting to update Cesar about what was discussed in the meeting with Harry. We thought about how we could implement a recommendation engine using the YNAP APIs provided along with others like IBM Watson. Came up with several idea of what the recommendation engine will look like in terms of navigation and use cases.

Meeting 4: Lab

Met at UCL. Focused on setting up development environments. Assigned tasks to each of the team members, as follows:

- Cesar in charge of producing 2D images in the HoloLens which are pulled from the Net a porter website.
- Diana in charge of designing a basic UI for navigation of products.
- Thom focusing on developing a basic recommendation engine.

TASKS COMPLETED

- Solved conflicting overlap between Teams 1 and 3.
- Set up Windows 10 Education on all our Mac computers to allow development from home.

The project is behind schedule. Our supervisor and our client are aware of this. We can get back on track but this needs to be our main priority.

PROBLEMS TO RESOLVE

A problem we have is related to deciding which machine learning mechanism to use, due to the minimal support for Unity (apart from a $95 openCV asset) we may be forced to write our own specific collaborative filtering algorithm in C# to solve this problem.

PLAN OF ACTION

In the following two weeks we will:

- Consolidate our idea with our client and allow no further change of requirements.
- Update our website with new content and research as per our new requirements.
- Build the basics of a 2D outfit recommendation engine in HoloLens.

INDEPENDENT WORK

Cesar

Made research into the possibility of incorporating Haptics. Emailed the producers of several potential technologies to incorporate texture feeling into the HoloLens, only to find out all of them were not yet available for purchase. Investigation into IBM Waston APIs and began development of a simple display of clothing.

Diana

Communicated with the client our new requirements as well as possible changes to the project. Created part of the presentation and sent it to the client. Made the first steps in starting to programme functionalities for our app: installed Windows and Unity on Mac and made a plan for development for the next two weeks.

Thomas

Began developing on the new idea for our application. Started building a plan for how the outfit recommendation engine could work, taking the Net-a-porter API inputs and outputs into consideration. Aim to have a basic 2D version of the outfit recommender working by weeks end.