



Bi-Weekly Report 7

AR Portal for GOSH DRIVE

Team 36

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COMP0016 System Engineering

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Overview:

We met with our client to discuss the app's first prototype and our presentation. Afterwards, we've started working on improving our prototype by moving the web app to a 3D platform and improving interactions in the Unity app.

Tasks Completed:

- Fix web app's bugs so it doesn't crash when updating objects
- User interaction with virtual objects, e.g. hold/move

Planned tasks:

- Set up a database for the web app for storing authentication information and room configurations
- Set up a database for the mobile app for storing downloaded room configurations
- Design mobile app user interface
- Research technologies (Unity web player, Blend4Web) for 3D web app
- Research suitable libraries for voice recognition in Unity
- Write scripts to automatically pack .fbx files into Unity's AssetBundle

Client Meeting:

We had a meeting with our client on the following date:

21/1/19 - Face-to-face meeting with Nadia at NTT Data. We demonstrated and discussed the current prototype, and how to move forward. We discussed moving our web app to WebGL and making it 3D to augment the model library's flexibility, as well as making the UI more intuitive.

Personal Reports

Yin Long Ho

I implemented the basic type of user interaction in the AR application, which allows users to hold and move virtual objects around. Also, I researched possible solution for users to upload 3D model files of their own and load them at runtime. Since Unity's API does not provide any means to load .fbx models at runtime, I am experimenting with batch script with Unity's command line arguments and C# script to pack the models into an AssetBundle. So each map has one AssetBundle containing its own set of 3D models.

Chirag Hegde

After accompanying the rest of my team to meet our client, I fixed the App so that it no longer crashes when used too quickly. I also researched options for creating a 3D version of the world creator. However, I was prevented from making much progress since my laptop and my backup laptop both failed during this two week period. In the meantime, I researched options for ensuring the security of user data that comply with UK law on the subject.

Haonan Zhang

I went with the team to discuss the app's progress and future development with our client last week. Afterwards, I've successfully remotely connected to the web app and have started work on the extra privacy feature, where we'll try to enhance the security so only certain users can see certain worlds.