Reflexive journals: These journals are designed to enable each student to reflect on and share a more individual impression of their own research and development, highlight their personal contributions to the group project as it progresses, and give their impressions of the contribution made by fellow team members. Each journal entry should take no more than 20-30 mins to complete.

Virtual Reality Collaborative Project 2023

Name: Tughu Aiyewa Date: 17/11/2023

Please give a brief summary of your group's activity during the previous two weeks

During the last demonstration, I had worked on getting the model triggered on a marker system. The previous model was a test build without any textures. During the last week the model has been modified greatly to include critical user interaction controls such as dragging model across screen for better positioning, rotating the model on screen to view hidden regions and scaling to get a better detail of the mesh. A hide/unhide functionality was also included to reveal key aspects of the model. Getting the drag and rotation interaction to work posed quite a challenge since both actions had similar finger movements on the screen, which caused a code conflict. This issue was resolved by introducing what I called a 'blocker' into the dragging code, which would lock any rotation of the model once a drag action was initiated by the user.

An additional model was also included into the AR app to demonstrate usage and application in other school subjects other than mathematics. The model is a beating heart to demonstrate the flow of blood. All critical interactions have already been included and tested. Model is fully textured and ready for in-app use as well.

Task left for both models is the inclusion of signpost to label key aspects of the model which is a key feature as part of the learning application.

What has been your particular contribution to the team, and involvement in the progress of this project during that time?

Key task during the past weeks are listed as follows:

- Retopology of heart model for optimal mobile performance.

- Researching, writing and debugging code for user interactions in C#. - Debugging and resolving translation and rotation conflict in code – [SOLVED]. - Creating and working with textures for the heart and diorama (Mathematics) model. - Implemented Show/Hide features for relevant user information and hiding model segments

Please share your impression of the contributions of each team member during this time, including yourself. Comments optional.

Name	% contribution	Comments
Tughu Aiyewa	100.00%	Learned a bit of coding in C# for the purpose of my task.

Send to Duncan.speakman@uwe.ac.uk and your academic supervisor by allotted deadline.