**ITERATION\_2**

In this iteration we wanted to run the model first and then deploy it to the browser and perform WebRTC protocols to establish peer to peer connection.

To display a unit model in a browser, we can use the WebGL build option in Unity to create a web-ready of the game or application. We have followed the steps and while downloading the WebGL version of the model it was displaying some errors and asked us to configure the player settings which we did and tried to build again after making changes but due to the compilation errors we couldn’t deploy the model into the browser. We tried to resolve the errors by looking at the documentation but the errors increased and we were not able to run the model again after making the changes.

In this iteration we wanted to do these below tasks

1. On the sender device, we need to create a WebGL build of the Unity model.
2. In the next step, we need to establish a WebRTC connection with the receiver device. This can be done using a WebRTC library, such as SimpleWebRTC or PeerJS.
3. Once the connection is established, we can use the WebRTC library to stream the Unity model from the sender device to the receiver device. The unity model will be rendered in the sender’s browser, and the rendered frames will be sent over the WebRTC connection to the receiver browser.
4. On the receiver device, we need to receive the WebRTC stream and display the unity model in the browser. This can be achieved using a WebGL context and the WebRTC library.
5. Once the Unity model is displayed on the receiver device, the two devices can interact with each other in real-time. For instance, the sender device could use input devices, such as keyboard or gamepad, to control the Unity model, and the receiver device could see the changes in real-time.

Below are the errors we are facing.

1. When colorspace is changed to gamma and AutoGraphics API was disabled, it is asking to add the HDRP asset to the main scene.
2. We have added the default HDRP asset to the main Scene and then we tried to build the model again, it is showing compilation errors which we tried to resolve using the Unity documentation but the errors haven’t been resolved.
3. Also when we have added the HDRP asset and build the model, HDRP asset is not compatible with the current scene and asked us to change it to Vulkan graphics API which we couldn’t find the option.