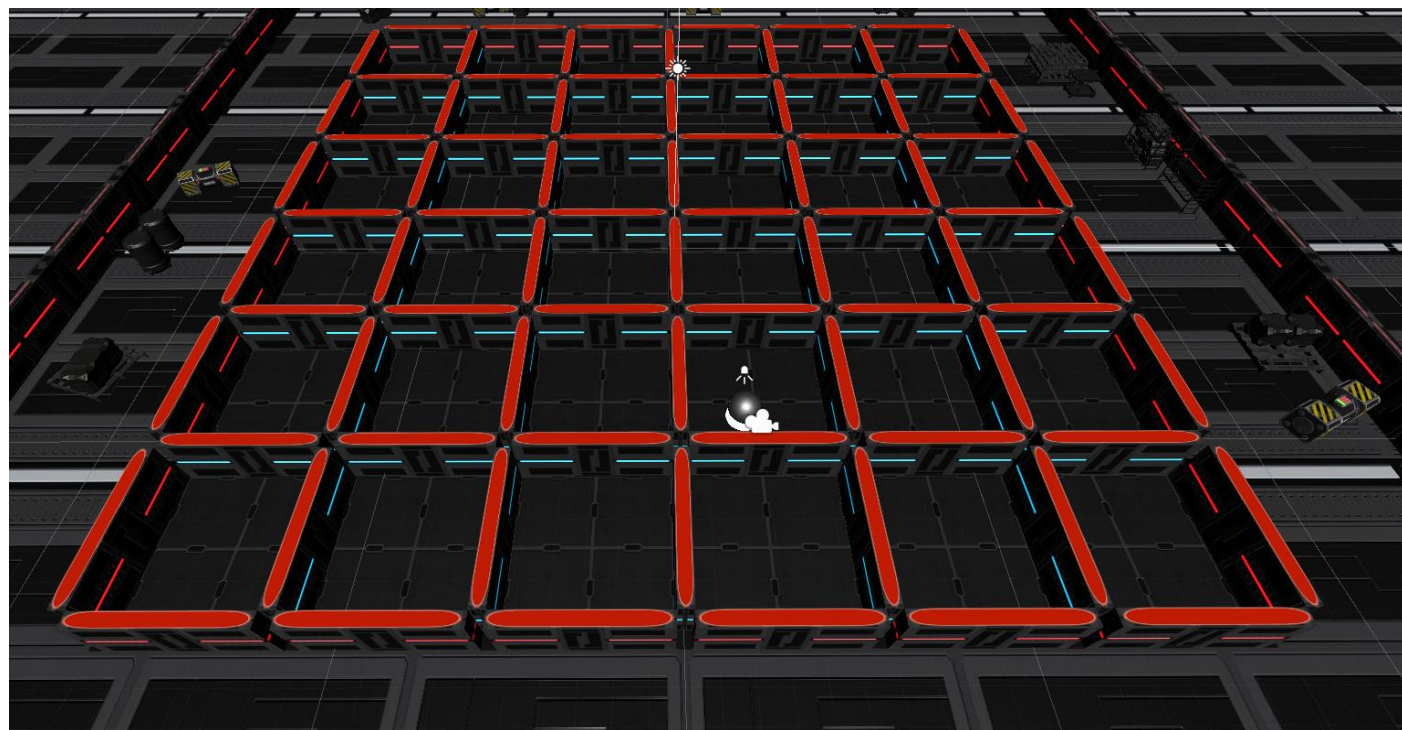


Brain Game based on attention detection

Student: Tan Chin Hoe, Samuel Supervisor: Dr. Smitha Kavallur Pisharath Gopi



Project Objective:

This project aims to design a BCI game with Unity 3D using the EEG Neuroheadset. Everyone of all ages will be able to enjoy and compete with their friends in the time-based maze game. They will get an idea of how the EEG Neuroheadset works along the standard controller in a game.

Game Objective:

The player will start at a specific grid point. It will need to search and obtain 3 barrels before looking for the exit to escape as soon as possible.

They can obtain 2 different abilities to assist them during the run and there are 4 different enemies (Roaming, Sentry, Laser, and Chasing) trying to destroy the player in the maze

How does the EEG Neuroheadset work in the game:

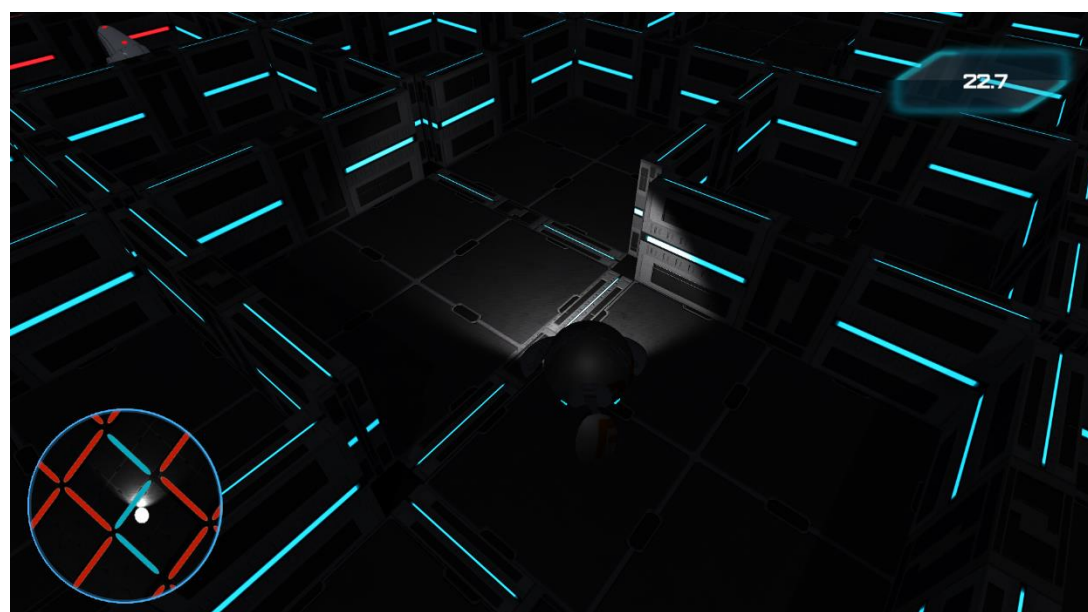


Connect Muse 2 to the PC

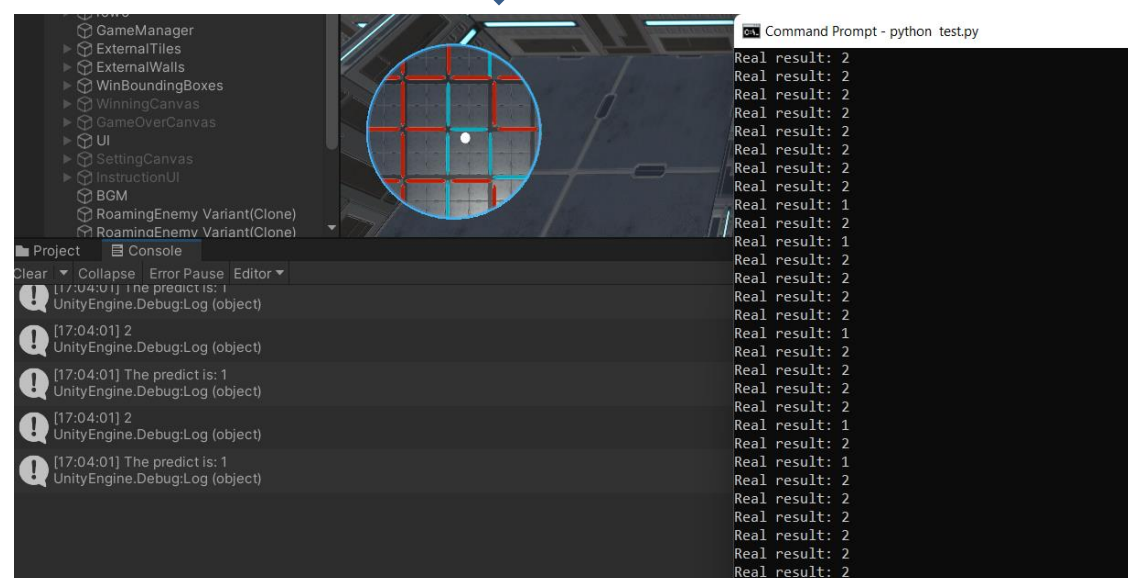


IOIO
IOIO

Extract the raw signal from the user and run against the trained model to obtain the predicted data in real-time



The player's light range and intensity will automatically increase if the player is focused



Send the predicted data from Python to C# via socket for it to work in Unity