Gesture Based UI Project Design Document

by

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Introduction

For our project for the module Gesture Based UI for the course Software Development, Antaine O Cognhaile and Brendan Toolan decided to do a voice recoginition. Originally both of us were to make our gesture based project using the hardware Myo but however due to the outbreak of Covid-19 this meant that we both did not have access to the Myo hardware that would of have been needed to develop our original idea and both of us had to go back to each of own houses. So we both decided to change up the project by using voice recognition as we would both have access to voice recognition programs on each of our laptops/computers. Our project is a game made using Unitiy and with the programming langauge 'C#'. We picked C# as it is easier to use with Unitity. The game will consist of the player trying to navigate through a maze to reach the end of it. Once the player gets to the end, he/she/they will advanced to the next level. While the player goes through the maze, there will be obstacles for them to avoid. There will also be enemy players that will try to catch the player in the maze. The player will then navigate through the maze using the built in voice recognition.

Purpose of the application

The purpose of this project was to create a game that is able to recognise the voice commands the user would say aloud. The project is a game set in the maze where the user must find there way out of. They navigate through the maze like so using the key arrows on the keyboard. However the user is able to use voice commands such as 'Run' so the player would be able to sprint through the maze and also can say the word jump so the player would be able to jump over any obstacles or anything in there way.

Gestures Indentified

Hardware Used in creating Application

Acrhitecture for the Solution

Conclusions & Recommendations

References

- https://www.youtube.com/watch?v=-igoV67B5h8
- https://www.youtube.com/watch?v=VnG2gOKV9dw
- https://www.youtube.com/watch?v=b4oqOdBCy3c