Sound Controller Interactive Scene Description

Our interactive scene will be utilizing the “Sound Game” created by our group member Trey. The sound game currently allows the player to traverse through a maze and they are prompted with sound cues for their movement. The game is won when the player reaches the end of the maze. Since it's a game for the blind, the visuals are not advanced. The scene has a representation of the player moving around the maze but this visual will be hidden from active players. The goal is for the player to listen to which directions are open and closed from the sound cues provided.

For our adaption, our controller is designed to help the player traverse the maze utilizing haptic feedback and motion as well as sound. Our controller will utilize the gyroscope to tell which direction the player wants to travel in. The player then presses the confirm button when aiming in a direction to move that way. The corresponding vibration motor will vibrate to let the player know they are travelling in that direction.

To win the game the player must traverse to the end of the maze. In terms of a loss condition, there is none. The player has unlimited time to reach the end.

Input mapping/ Outputs

Gyroscope - Handles what direction you are aiming in and relays the information to unity. (Left, Right, Up, Down, No Direction)

The gyroscope outputs in the debug log the direction you are aiming.

Button 1 - the confirm button, handles confirmation of movement

The game moves the player each time this button is pressed when the gyroscope is facing a direction.

Button 2 - Restart level

Resarts the game level and puts the player back to the first square.

Button 3 - start game

Sets up the game to start accepting inputs.

Vibration motors- One for each direction, when you press the confirm button the corresponding vibration motor vibrates.