A Brief of Reflection Report for Assignment 4 Speech Input with Voxel character in hologram and AR

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Reflection

In this assignment, I implement speech recognition so that your character can move based on your spoken commands. I watched some YouTube videos for inspiration and encoded speech input using the UnityEngine.Windows.Speech library in C#. This code recognizes your voice and allows the character to perform the desired action. Since I already completed the hologram part in a previous assignment, I just need to integrate it with a C# script to recognize voice input so that my character can respond to my commands.

In the next part of the assignment, I need to track real objects and bring my voxel characters into the real world using Unity and Vuforia. First, I downloaded the Vuforia assets for free from the Unity Asset Store. This gives me access to AR camera and model target functionality. My model target for this task is a medicine bottle. To capture the medicine bottle, I use Polycam to capture it using my phone and export it in GLTF format. Then, send it to the Target Model Generator to obtain a model target. Additionally, I generate a Vuforia license and add the license key to the AR camera in Unity (Vuforia Engine Configuration) before using the Vuforia in Unity. Lastly, I use your webcam to interact with the real world, allowing me to perform voice input and control voxel characters in AR environments.

Demo Reel (Youtube link) - https://youtu.be/RAAEc0GXmd0