Trien Dau

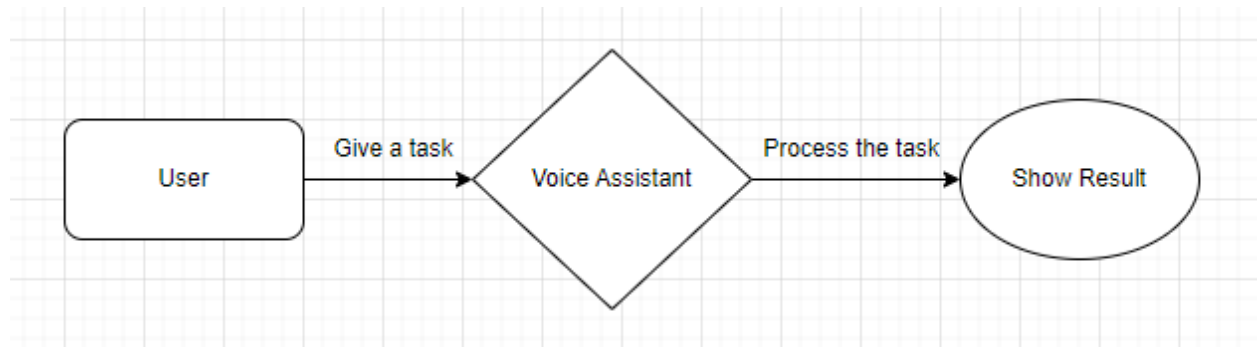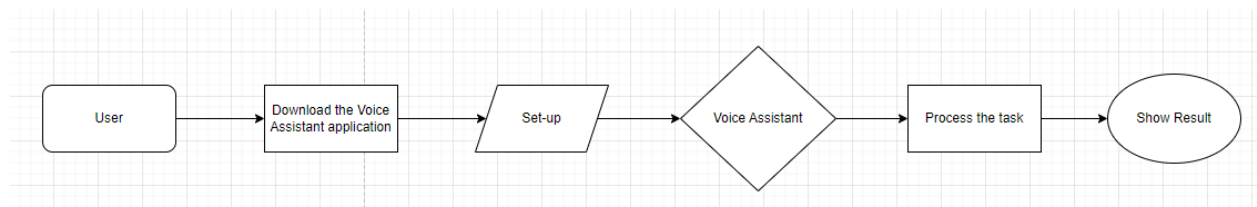**Haru Chu**

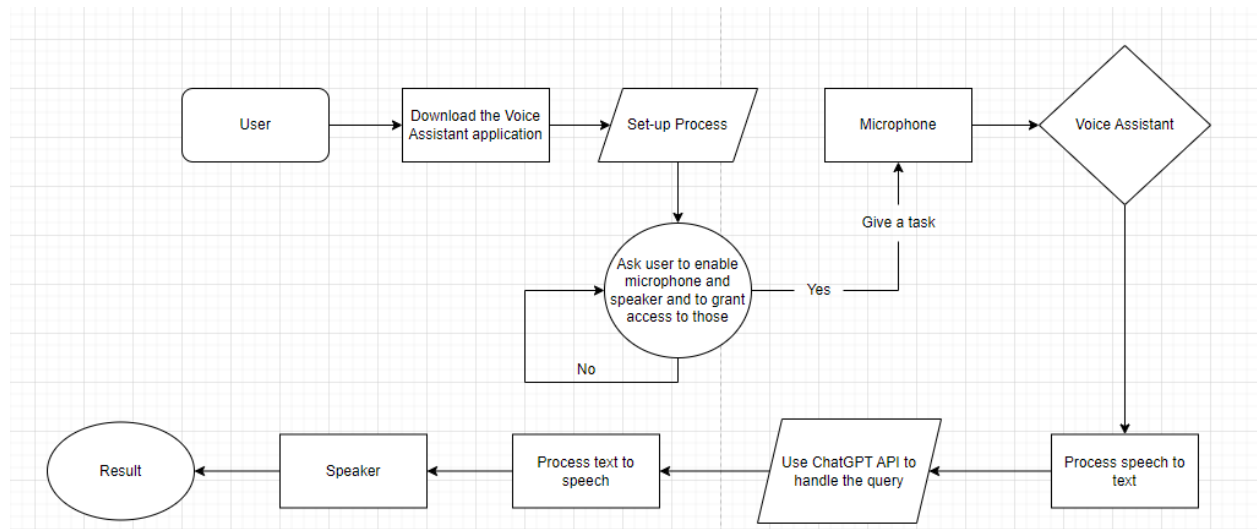# Voice AI Assistant - Senior Design Project

Design D0: In this diagram, the user, represented by a rectangle with rounded edges, is providing the Voice Assistant with a task/request, and the voice assistant will process this request and prompt the result.

Design D1: This diagram shows that the user will have to download the application in order to have access to the program. After launching the program, they will need to go through the setup process, and will finally be able to use Voice Assistant. The user will

then provide the Voice Assistant with a request, which will be processed by the program. Finally, the result will be displayed to the user.

Design D2: This diagram is much more in-depth compared to D0 and D1. Firstly, the user will need to download the Voice Assistant application and go through the setup process after launching it. The program will ask the user to grant access to their microphone and speaker. If the user declines access, then the program will insist on getting accessibility to those 2 features since it depends on using the microphone to take input and using the speaker to prompt the results. If the user selects Yes, they will now be able to use the Voice Assistant feature. They can give a task/request to the Voice Assistant through their microphone. After that, the program will process whatever they say and convert that to text. Then, ChatGPT API will come into play by handling that query and providing the summarized results. Text-to-speech (TTS) will then convert whatever text result we have into speech and output them to the user through their speaker. After all, the user will have their questions/requests answered by the program.