Blind User

speaks to the

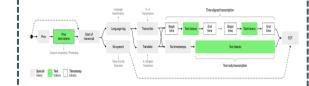
Device

User Initiates Conversation through Mic



User starts a conversion with the assistant on activation button.

The recorded message is transcribed into text.



Stack used for module



Speech Recognition to capture speech



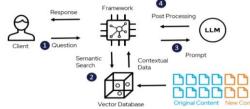
OpenAl's Whisper used to transcribe audio

System performs similarity search in the created Vector Database

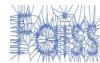


System returns top 'k' indexes and appends relevant data to query.

The query along with retrieved information is sent to LLM.



Retrieval Augmented Generation Architecture



GPT3.5 API

LLM

FAISS-Similarity Search Library LLM output to Voice Conversion



The text Output received from the LLM will be converted to voice using locally run module (pyttsx3)



Text to Speech



TTS Library



Auditory Feedback (pyttsx3)