

AI For Accessibility

End to End Real Time Transcription & TTS

Importance of Accessibility

6.1 percent of U.S. adults are deaf or have serious difficulty hearing. - [CDC](#)

23% percent of disabled respondents say they “never” go online - [Pew Research](#)

217 million people worldwide had moderate to severe vision impairment in 2015, with this number expected to rise to 588 million by 2050 - [WHO](#)

[Web Content Accessibility Guidelines](#)
Few platforms are compliant!

Voice Accessibility

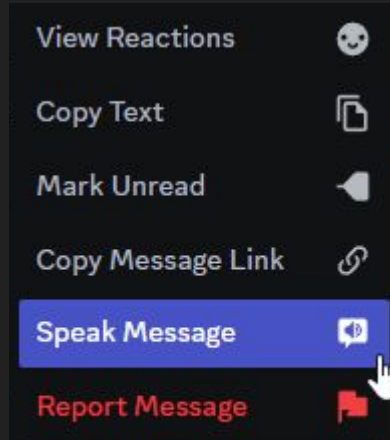
Voice Commands, Speech to
text, etc.

Existing tools are built on decades
old technology.

Voice Accessibility Problems

Platforms like Discord, Teamspeak, & others have some accessibility tools, but there is no way to truly grant access to a group voice call for hearing or speech impaired users.

Regardless of tooling on platform, accessibility options do not provide the same level of usability.



We offer three default soundpacks:

- 1) Spoken text from wave files (default)
- 2) Spoken text via TTS (for channel-, nick- and servernames)
- 3) Silence

Our approach

Multi-model applications

Using modern AI models, results and accuracy of voice related accessibility tools can be improved significantly.

With parallelism and asynchronous code, real time conversations can be both transcribed and synthesized back and forth between users.

Becoming an end to end solution, seamlessly integrating into your favorite VOIP platform.

End to End solution

Leveraging API based models, our project delivers a real time voice substitute for our accessibility users.

A Whisper model runs real time transcriptions on everyone in the voice call, splitting transcription per speaker.

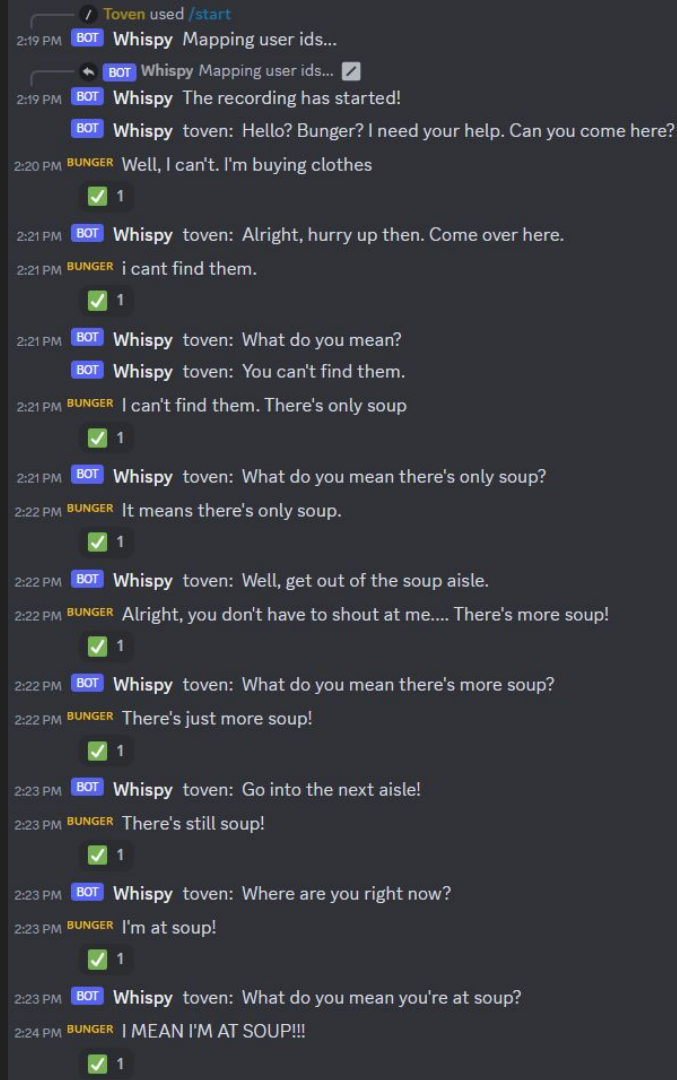
Elevenlab's API plays a user selected voice model Text to Speech of the user's message content.



Behind the scenes:

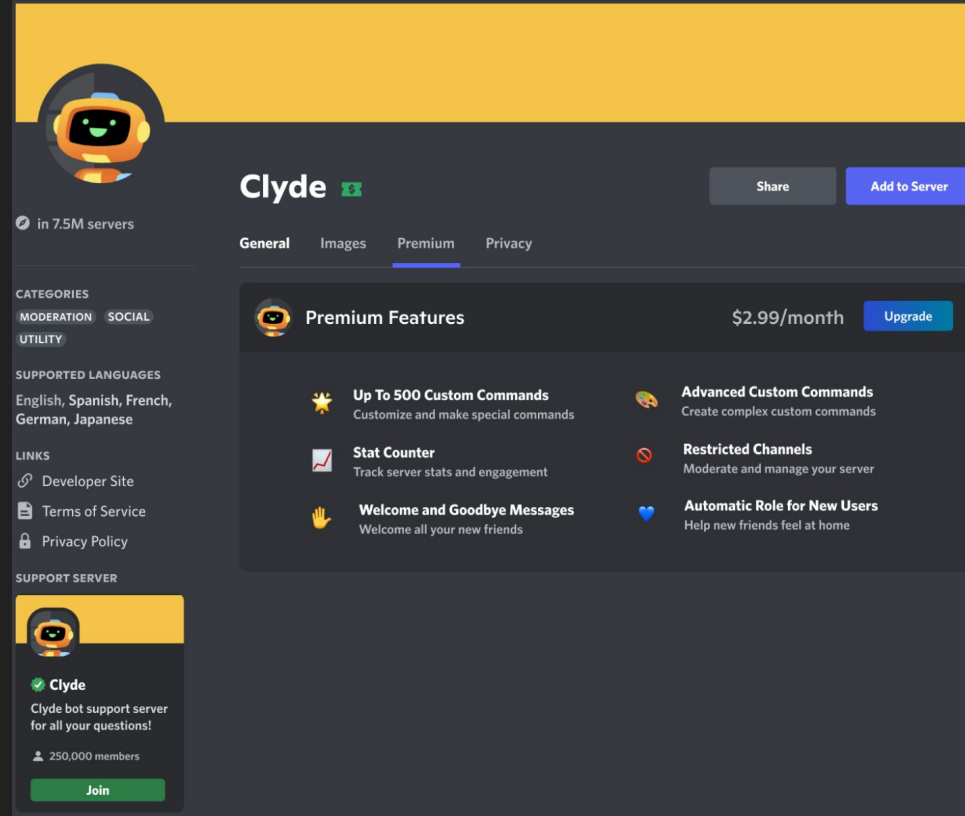
- Whisper model transcribes chunks from voice call audio stream
- Elevenlabs Toven instant voice clone synthesizes messages into speech
- Discord Text & Voice channels are used to output results of both models
- Seamless voice channel accessibility for users of any level of ability.

Example Transcript + TTS Usage



Pricing model

- Discord Premium Bot
- Future integrations into other platforms
- Additional offering as a standalone tool



The screenshot displays the Discord server page for the Clyde bot. At the top, the Clyde bot avatar is shown next to the server name "Clyde" and a verified badge. Below the name, it indicates "in 7.5M servers". Navigation tabs for "General", "Images", "Premium", and "Privacy" are visible, with "Premium" currently selected. The "Premium Features" section is highlighted, showing a price of "\$2.99/month" and an "Upgrade" button. The features listed include:

- Up To 500 Custom Commands**: Customize and make special commands.
- Advanced Custom Commands**: Create complex custom commands.
- Stat Counter**: Track server stats and engagement.
- Restricted Channels**: Moderate and manage your server.
- Welcome and Goodbye Messages**: Welcome all your new friends.
- Automatic Role for New Users**: Help new friends feel at home.

On the left sidebar, there are sections for "CATEGORIES" (Moderation, Social, Utility), "SUPPORTED LANGUAGES" (English, Spanish, French, German, Japanese), "LINKS" (Developer Site, Terms of Service, Privacy Policy), and "SUPPORT SERVER" (Clyde bot support server for all your questions! with 250,000 members).