LiveCap Speech Recognition System Manual

Description

The Real-Time Speech Recognition System, developed by Miguel Kallemback, aims to transform accessibility in audiovisual content, offering real-time audio transcription in several languages. It is ideal for professionals in the audiovisual industry who are looking for an economical solution to make their content accessible to a wider audience.

Interface

The system interface consists of a set of controls for customizing the visualization of transcriptions and a text field where transcriptions are displayed.

Control Table

Control	Description
Microphone Selection	Allows the user to select the desired microphone from a list of available microphones.
Start	Starts the speech recognition service. Clicking again restarts the service.
Background Color	Allows the user to change the interface background color.
Text Color	Allows the user to change the transcribed text color.
Font Size	Controls the font size of the transcribed text.
Output Width	Controls the width of the area where the text is transcribed.
Font Style	Allows the user to choose from several font options for the transcribed text.
All Capital Letters	If selected, transforms all letters of the transcribed text into uppercase.
Copy Text	Copies the transcribed text to the clipboard.
Reset Preferences	Resets all custom preferences to default values.

Transcription Area

In this area, the recognized text is displayed in real-time, and the user can copy it as needed.

Use

1. **Microphone Selection**: Select the desired microphone.
2. **Start**: Click to start speech recognition.
3. **Customization**: Adjust the visualization preferences as desired.
4. **Copy Text**: After transcription, click "Copy Text" to copy the transcription.
5. **Reset Preferences**: To return settings to default values, click "Reset Preferences".

User Preferences

User preferences, such as background color, text color, font size, output width, and font style, are saved locally. This means that when the user returns to the system, their preferences are retained.

Accessibility

The system was developed with accessibility in mind, and various visualization preferences can be adjusted to meet individual user needs.

Language Support and Language Codes

The system supports speech recognition in several languages, allowing its use by users of different nationalities.

Language Codes

Language	Code	Example URL
Portuguese	pt-BR	Example
English	en-US	Example
Spanish	es-ES	Example
French	fr-FR	Example
German	de-DE	Example
Italian	it-IT	Example
Russian	ru-RU	Example
Japanese	ja-JP	Example

How to Use a Virtual Audio

1. **Install a Virtual Cable Software**: Several options are available, such as VB-Cable and Virtual Audio Cable.

2. **Configure Virtual Audio**: After installation, set up virtual audio as the default output device in your system sound settings.
3. **Use Audio Broadcasting Software**: Software like Voicemeeter can be used to send audio from a specific application to virtual audio.
4. **Select Virtual Audio in the Speech Recognition System**: In the LiveCap system, select the virtual audio device as the microphone to be used.

How to Integrate with OBS Studio for Lives

1. **Add a New Browser Source**: In OBS Studio, right-click under the "Sources" panel and select "Browser".
2. **Configure URL and Dimensions**: In the properties window that appears, enter the URL of the LiveCap system with the desired language code. Set the width and height as necessary.
3. **Adjust Audio Settings**: In "Settings" > "Audio", set the virtual audio device as one of the Microphones/Auxiliaries.
4. **Start Broadcasting**: After configuring everything, start live broadcasting in OBS Studio.

Configure with OBS and Google Chrome

Step 1: Installing VB-Cable

- Go to the official VB-Cable website and download the software.
- Run the downloaded file and follow the on-screen instructions to install the software.
- After installation, you will have a new playback and recording device in your sound settings. This is your virtual cable.

Step 2: Configuring OBS Studio and Google Chrome

- Open OBS Studio and go to the "Sources" panel.
- Right-click on this panel and select "Browser" to add a new browser source.
- A properties window will be opened. Enter the URL of the LiveCap system, adding the desired language code to the end of the URL. For example, for Portuguese, the URL would be: `https://navve.studio/legenda/index.html?lang=pt-BR` .
- Adjust the window dimensions as needed.
- Go to "Settings" > "Audio" and set the VB-Cable device as one of the "Mic/Aux".
- We recommend using the Google Chrome browser, as some browsers may not allow microphone access through OBS Studio.

Step 3: Capturing the Browser Screen in OBS Studio

- With OBS Studio open and Google Chrome configured, go to "Sources".

- Add a new source by clicking on "+" and select "Window Capture".
- A new window will be opened, select the Google Chrome window that is displaying the LiveCap system.
- Adjust the size and position of the capture as needed.

Step 4: Starting the Broadcast

- After setting up the virtual microphone, the browser source, and the screen capture, you are ready to start broadcasting.
- In OBS Studio, click on "Start Streaming" and enjoy real-time subtitles in your live broadcasts!