Project ALG Audio Version

Project ALG Audio Version is an Al-powered system designed to generate song lyrics based on user inputs and provide an audio output of the generated lyrics. The project integrates natural language processing (NLP) models to create original song lyrics in multiple languages and styles, and Text-to-Speech (TTS) capabilities to convert the lyrics into a spoken form. The system supports both text-based and voice-based inputs, making it versatile and easy to use for a wide range of users.

Product Design and Features

1. User Inputs:

- Text Input: Users can type a description of the song's theme or scene (e.g., a love story, war scene, emotional farewell) in a text box.
- Voice Input: Users can also speak the description using their microphone, which will be transcribed into text using live transcription.

2. Live Transcription:

 The voice input is processed in real-time, and users can see the transcription of their speech, allowing them to verify and edit the description if necessary.

3. Lyrics Generation:

- The system generates song lyrics based on the description, genre, and emotion provided by the user.
- Genre Options: Users can select from multiple genres such as Classical, Pop, Rock, Hip-hop, Jazz, and Country.
- Emotion Input: Users can specify the emotion they want the song to evoke (e.g., sadness, joy, excitement).

4. Multi-Language Support:

 The generated lyrics can be created in multiple languages, including English, Telugu, Hindi, Tamil, Kannada, and Malayalam. English Script Option: For non-English languages, the user can opt to see the lyrics written using the English alphabet (transliteration) for better understanding.

5. Audio Output:

- After generating the lyrics, the system provides a spoken version of the lyrics using Text-to-Speech (TTS) technology.
- Users can listen to the generated lyrics in a natural-sounding voice, with audio downloadable for future use.

6. Gradio Interface:

- The user interface is built using Gradio, which provides a simple, interactive platform for users to input their song descriptions, view live transcriptions, and receive both the lyrics and audio output.
- The interface is intuitive, with radio buttons, checkboxes, and dropdown menus for easy selection of input methods, languages, and genres.

Who Can Use This Project?

Project ALG Audio Version is intended for:

- Musicians and Songwriters: Artists looking for inspiration or assistance in writing lyrics for their songs can use this tool to generate creative and original lyrics.
- Filmmakers and Scriptwriters: Professionals working on movie scenes or scripts can use the tool to create theme-specific songs or background lyrics for their projects.
- **Content Creators:** YouTubers, podcasters, and other content creators who need original songs in multiple languages can generate lyrics that suit their content's mood and style.
- Language Learners: People learning new languages can use this tool to explore how lyrics are structured in different languages and practice pronunciation through the TTS feature.

How to Use Project ALG Audio Version:

1. Choose Input Type:

Select either text or voice input based on your preference.

2. Describe the Song:

 Provide a description of the song's theme or scene either by typing or speaking.

3. Select Genre and Emotion:

 Choose a genre that matches the song's mood and specify the emotion you wish to convey.

4. Choose Languages:

 Select one or more languages in which you want the lyrics to be generated.

5. Review and Edit Transcription:

 If using voice input, review the live transcription to ensure accuracy before proceeding.

6. Generate Lyrics and Audio:

 Click the "Generate" button, and the system will generate both the lyrics and an audio version of the lyrics for you to review, listen to, and download.

Conclusion:

Project ALG Audio Version offers an innovative approach to generating multilingual lyrics with audio outputs, making it a versatile tool for creators in the music and entertainment industries. Its easy-to-use interface, multilanguage capabilities, and real-time transcription make it accessible to a wide audience, from professional musicians to language learners.