AI Assistant using Streamlit & Generative AI

Overview

This AI Assistant is a multi-functional tool built using **Streamlit**, integrating **Google Gemini AI**, **OpenAI GPT**, **Google Translator**, **Speech Recognition**, and **Web Automation**. It allows users to generate AI responses, translate text, open websites, and play music through both text and voice commands.

Features

- **AI Response Generation:** Uses Google Gemini AI to answer user queries.

- **Text Translation:** Supports multi-language translation via Google Translator.

- **Website Automation:** Opens frequently used websites with a simple command.

- **Music Playback:** Searches and plays songs on platforms like Spotify, YouTube, and Apple Music.

- **Voice Command Support:** Converts speech to text for hands-free interaction.

Technologies Used

- **Streamlit** - For building the interactive web app.

- **Google Gemini AI** - For AI-generated responses.

- **OpenAI GPT** - For additional AI response generation.

- **Google Translator** - For multilingual support.

- **SpeechRecognition** - For processing voice input.

- **Webbrowser Module** - For automating website and music playback.

Installation

Prerequisites:

- Python 3.7+

- API keys for Google Gemini AI and OpenAI GPT

Steps:

1. Clone this repository:

2. git clone https://github.com/your-repo/ai-assistant.git

cd ai-assistant

3. Install required dependencies:

pip install -r requirements.txt

4. Add API keys in Streamlit secrets:

5. mkdir -p ~/.streamlit/

6. echo "[secrets]" > ~/.streamlit/secrets.toml

7. echo "API_KEY='your_google_gemini_api_key'" >> ~/.streamlit/secrets.toml

echo "OPENAI_API_KEY='your_openai_api_key'" >> ~/.streamlit/secrets.toml

8. Run the application:

streamlit run app.py

Usage

1. Select a task from the sidebar (e.g., Generate Response, Translate Text, Open Website, Play Music).

2. Enter text or use voice commands.

3. Click the respective button to process the request.

4. View the output and interact as needed.

Future Improvements

- Improve **voice recognition** accuracy.

- Add **task automation** like setting reminders.

- Expand **music platform support**.

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