# Techietalks AI - Multi-Model Chat Assistant

Welcome to the Techietalks Al repository! This project is a multi-model Al-powered chat assistant built using Streamlit, Pydantic\_Al, and multiple Al models like OpenAl, DeepSeek, and Gemini. It allows users to interact with different Al models, switch between them, and enjoy a conversational experience. Additionally, this version includes Retrieval-Augmented Generation (RAG) functionality for processing PDFs and text files, website content integration, and an enhanced booking tool for generating personalized booking reference numbers.



by Sreeprakash Neelakantan



### Repository Structure

#### **Core Files**

- .env: Stores environment variables like API keys.
- .gitignore: Specifies files to ignore during Git commits.
- Dockerfile: Instructions to build a Docker image for the Streamlit application.
- README.md: This file, providing an overview and setup instructions.
- app.py: The main application file, containing the Streamlitbased chat interface, Al model integration, RAG functionality, website content integration, and enhanced booking tool.
- docker-compose.yml: Configuration file to run the application using Docker Compose.
- requirements.txt: Lists Python dependencies.

#### **Data and Web**

- data/: Directory containing PDFs, text files, and vector embeddings for RAG functionality.
- web/static/index.html: Static HTML file served by the NGINX web server.

### **How It Works**



#### **Streamlit**

Powers the interactive chat interface.



### **OpenAI**

Generates conversational responses.



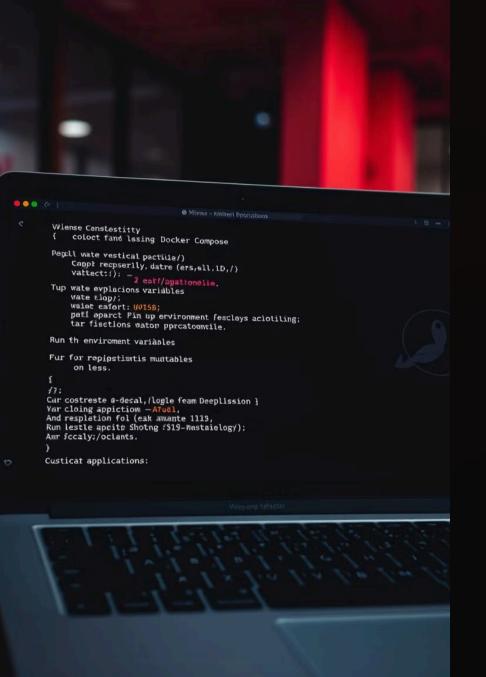
### DeepSeek

Provides conversational responses.



### Gemini

Generates responses.



### Setup Instructions

1 Prerequisites

Python 3.11, Docker, and API keys for OpenAI, DeepSeek, and Gemini.

Clone the Repository

Use Git to clone the repository and navigate to the project directory.

Set Up
Environment
Variables

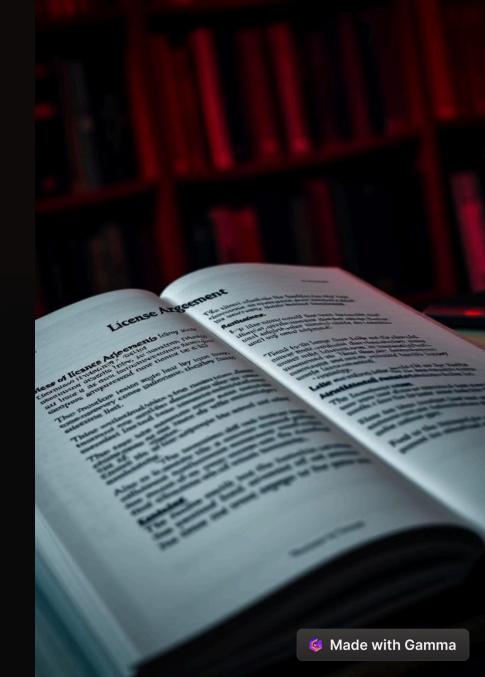
Create a .env file and add your API keys for OpenAI, DeepSeek, and Gemini.

Run the Application

Use Docker Compose to build and run the application. Access the Chat Assistant at http://localhost:8502 and the Web Server at http://localhost:8503.

# License

This project is open-source and available under the MIT License. Feel free to use, modify, and distribute it as needed.



### Contact

For Al consultancy, training, and development, contact Schogini Systems Private Limited at https://www.schogini.com.



## Author

Sreeprakash Neelakantan

Website: https://www.schogini.com

GitHub: https://github.com/schogini/techietalksai.git

# Enjoy Techietalks AI!

Enjoy using the Techietalks Al Multi-Model Chat Assistant with RAG, Text File Support, and Enhanced Booking Tool! If you have any questions or feedback, feel free to reach out.

