**Project Proposal: AI Chat Bot**

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**Description**

The AI Chat Bot App is a web-based application which allows users to interact with AI. The users will be able to save their conversation history for later use. This app will offer a clean and easy to understand user interface which will allow users to chat with AI in real time.

**Stack:**

**Frontend**: The front end will utilize React App

**Backend**: The back end will utilize Flask with Python and Open AI API ChatGPT 3.5

**Database**: I will be using PostgreSQL for the database.

**Focus:**

I will focus on making this application user friendly without any glitches, which will use front end and back end interacting with ChatGPT api.

**Type:**

This app will be a web based application for use of desktop and mobile devices.

**Goal:**

The main purpose of the AI ChatBot project is to create a simple and user friendly platform where users can have real-time chats with an AI chatbot. Users can use the chatbot for many things, like casual conversations, asking questions and brainstorming ideas.

**Users:**

The primary users of this app will be:

Users who are curious about AI and natural language processing.

Users who want a virtual assistant to chat with casually or brainstorm ideas.

Users looking for some fun by talking to an AI chatbot.

Tech enthusiasts who enjoy new and innovative web apps.

**Data**

**Primary Data Source**: The ChatGPT-3.5 API by Open AI, which provides dynamic responses based on user input.

**Secondary Data**: User data, including conversation history, user preferences, and user authentication.

**Data Collection**: User data will be collected through front-end forms and API requests. Conversation history and settings will be stored in the database.

**Here is the structure of my app:**

**Frontend (React) Development:** Front end development, which will include a chat window for user and chat bot conversations. This will also include a user input field for sending messages. I will also provide features for saving or deleting past conversations.

**Backend (Flask) Development:** This back end will include Flask restful API endpoints to handle front end requests. It will communicate with ChatGPT open AI API. It will also communicate with a database to store user information and conversation history.

**Database Schema:** This will include a user table to store user information such as user name and password, It will also store conversation history for each user. It will also have a preferences option to store language settings

**Challenges and Issues:** API rate limits could be an issue with the free ChatGPT plan. It will take some work to make sure that the input is handle correctly for dynamic real time conversation.

**User Flow:** The user flow will be if the user signs in or uses a guest mode. The user will send a message and the front end will send a message to the back end handler where it it is then send to the Open AI Api. Then AI will create a response and return it and it will be display in the chat window.

**Functionality and Features:** This will include dynamic chats with the chat bot, and to save past conversation. Also include with my user Authentication and log in. There will be an option to customize language settings.

**Conclusion**

The AI ChatBot project is a web app that mixes a React front end with a Flask backend to give users a cool, interactive chat experience with AI. Using the OpenAI GPT-3.5 API, this project will show off what modern AI can do and make a great addition to the portfolio..