**Chat bot(lina) Documentation**

**Overview**

This Flutter application is a chat interface built using the Dash Chat 2 package. It allows users to send and receive text messages, as well as images, and integrates with Gemini for generating responses to user queries.

**Features**

* **Real-time Chat**: Users can send and receive messages in real-time.
* **Response Generation**: Integration with Gemini for generating responses to user messages.
* **Profile Images**: Profile images are displayed for both the current user and the Gemini user.

**Usage**

**Dependencies**

* Dart SDK
* Flutter
* Dash Chat 2 package
* Flutter Gemini package
* Image Picker package

**Installation**

1. Clone the repository to your local machine.
2. Ensure that you have Flutter and Dart installed on your system.
3. Run **flutter pub get** to install the required dependencies.
4. Connect a device or start an emulator.
5. Run **flutter run** to launch the application.

**Functionality**

* **Sending Messages**: Users can send text messages by typing in the message input field and tapping the send button.
* **Sending Images**: Users can send images by tapping on the image icon in the chat interface, selecting an image from the gallery, and confirming the selection.
* **Receiving Responses**: When a message is sent, Gemini generates a response based on the message content and sends it back to the user.

**Code Structure**

* **HomePage**: The main screen of the application, displaying the chat interface.
* **\_HomePageState**: The state class associated with the HomePage widget, responsible for managing the chat messages and user interactions.
* **Gemini Integration**: Gemini is integrated into the **\_sendMessage** method to generate responses to user messages.
* **UI Components**: The UI is built using Flutter widgets such as Scaffold, AppBar, and DashChat.

**Future Enhancements**

* Implementing user authentication for personalized chat experiences.
* Adding support for sending voice messages.
* Enhancing the UI with additional customization options.