Groq-Bot: An AI ChatBot – Simple Project Overview
This chatbot project is a Streamlit app that lets users chat with an AI using Groq's
language models. It responds live as you type and keeps track of your conversation
history.

Main Features
- ☑ Made with Streamlit – simple and interactive UI.
- ☑ Connects with Groq's Python SDK for AI chat.
- ☑ Shows streaming responses – replies appear word by word, like real-time typing.
- ☑ Remembers chat history using session state.
- ☑ Sidebar lets users:
  - Pick an AI model (like llama, mistral, gemma)
  - Change response style (temperature)
  - Clear chat history
- ☑ Secure API key setup using .streamlit/secrets.toml (not shared online).

Project Files Explained
- app.py → The main code file that runs the app.
- .streamlit/secrets.toml → Stores your private API key safely.
- .gitignore → Tells GitHub not to upload secrets or unnecessary files.
- requirements.txt → List of packages the app needs.

How the Code Works (In Simple Steps)
1. get_client()
- Gets the Groq API key from your secrets.
- If not found, shows an error.
- If found, creates a Groq client to connect with the AI.

2. stream_response()
- Sends your question to the AI.
- Gets back the answer bit by bit (streaming).
- Builds and shows the full response live as it comes in.

3. UI & Chat Logic
- The app shows a title and welcome message.
- On the left sidebar, users can:
  - Pick a model
  - Adjust how creative the answers are (temperature)
  - Clear chat
- The chat system:
  - Tracks messages: everything you and the bot say.
  - Displays chat in message bubbles (like WhatsApp).
  - Uses a placeholder to show replies as they come in (live streaming).

How to Use & Deploy
Run Locally
1. Download (clone) the project.
2. Install everything:
3. pip install -r requirements.txt
4. Create a file named .streamlit/secrets.toml and add your API key:
5. GROQ_API_KEY = "your_api_key_here"
6. Run the app:
7. streamlit run app.py

Deploy on Streamlit Cloud
1. Push the project code to GitHub (don't include the secrets file).
2. Go to Streamlit Cloud.
3. Create a new app using your GitHub repo.
4. In Secrets Manager, add:
5. GROQ_API_KEY = your_api_key_here
6. Deploy and share your chatbot!

UI Screenshots (Reference)

The following screenshots illustrate the chatbot interface and its functionality.