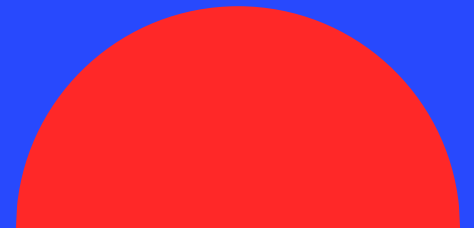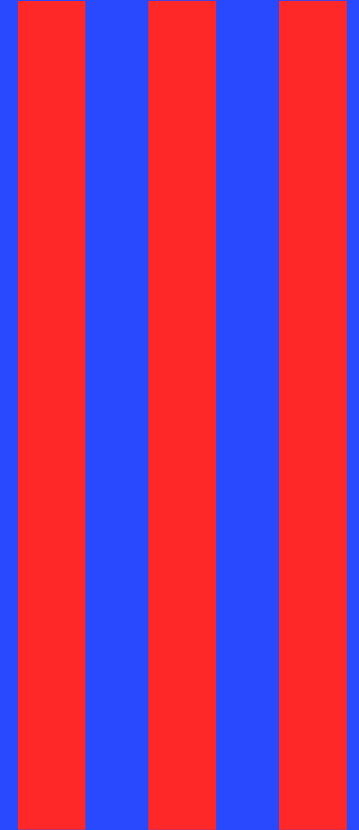# GIKI Prospectus Q&A Chatbot

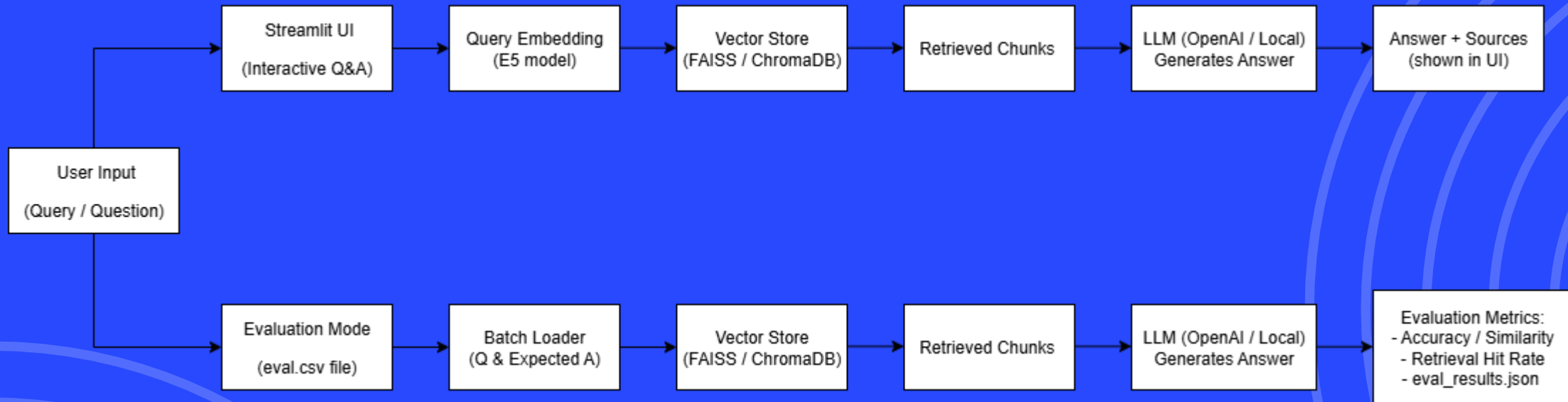AI-Powered Answers with RAG

Approaches, Tools & Techniques

- Retrieval-Augmented Generation (RAG)

- Document ingestion, chunking & embedding

- FAISS/Chroma vector store for retrieval

- OpenAI GPT models for response generation

- Streamlit for user interface

Architecture Diagram

Results, Limitations & Challenges

Results:

- Accurate, context-aware answers from uploaded docs
- Easy-to-use chatbot interface

Limitations:

- Dependent on API availability

Challenges:

- Handling large documents
- Efficient chunking & retrieval tuning

Creative Elements & Future Improvements

- Interactive Q&A (via Streamlit) and Batch evaluation

- Custom support for multiple document types

- Custom support for multiple languages (English, Urdu)

- User-friendly UI with upload & query features

- Option to export chat history (PDF, Markdown)

Future Improvements:

- Improve evaluation pipeline

- Optimize vector DB for scalability

- Add support for more languages

Deployed Streamlit Application

https://giki-prospectus-chatbot-4wzwkd4nafxdjovcetqnbe.streamlit.app/
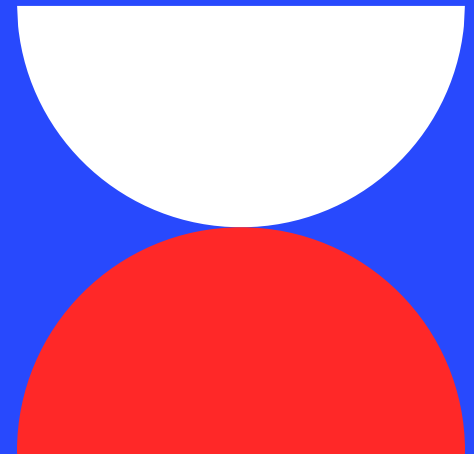
⚙ Settings

Embedding model

Select embedding model

intfloat/multilingual-... ∨

Generator (LLM)

Answering model

OpenAI: gpt-4o-mini ∨

Creativity (temperature)

0.00

●—————————————

Top-k retrieved chunks

5

———————●———————

🎓 GIKI Prospectus Q&A — RAG Chatbot

Chat with your uploaded documents

Ask a question about the uploaded documents... ➤

👶 tell me about medical facilities at giki

🤖 The medical facilities at GIKI include a Medical Center where students can consult doctors. If students have prescriptions from outside the Institute, they are advised to consult the Institute's doctors as well [source: Student-Handbook-2021-22.pdf p.6]. Additionally, if a student is prescribed bed rest by a certified medical doctor, this must be countersigned by the Medical Superintendent of the Institute's Medical Center for approval regarding exam accommodations [source: Student-Handbook-2021-22.pdf p.22].

指 **Language**

Response language

🔘 English ◯ Urdu

↓ **Downloads**

Top-k retrieved chunks

5

◉ English ⚪ Urdu

👤 tell me about medical facilities at giki

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⬇ **Downloads**

🧹 **Upload Documents (max 5)**

Upload PDF, DOCX, or TXT files ⊘

Drag and drop files here

Limit 200MB per file • PDF, DOCX, TXT

Browse files

📄 Student-Hand... ✕
0.8MB

⌄ Sources

• **Student-Handbook-2021-22.pdf (p.49)**

ed student must live in the hostel. Male students shall not go beyond the GIKI Medical Center, to the faculty residential area or Girls Hostel. Female students shall not go towards faculty/staff residential area, inside the Boys' hostel and the premises of the boys' hostel. For specific reasons, the students shall get

📚 Build / Rebuild   🖌 Reset Index

- Student-Handbook-2021-22.pdf (p.49)

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- Student-Handbook-2021-22.pdf (p.6)

6 their part to consult our doctors even if they get the prescription from outside the Institute. 2. 4. Banking Facilities There is a branch of Habib Bank at the campus, which offers the usual banking facilities including foreign currency accounts/ATM. You are advised to open a bank account and deposit your money in it. It is advisable not to keep large amounts of cash with you or in the hostel rooms. 2. 5. Transport Facilities Transport arrangements for the students and the staff to Rawalpindi,...

- Student-Handbook-2021-22.pdf (p.33)

33 xviii) Theft or Damage of Property or Services (GIKI-SC-85) Actual or attempted theft of, or damage to, property or services belonging to the Institute, any member of its community, or a campus visit is prohibited.

Thank you