

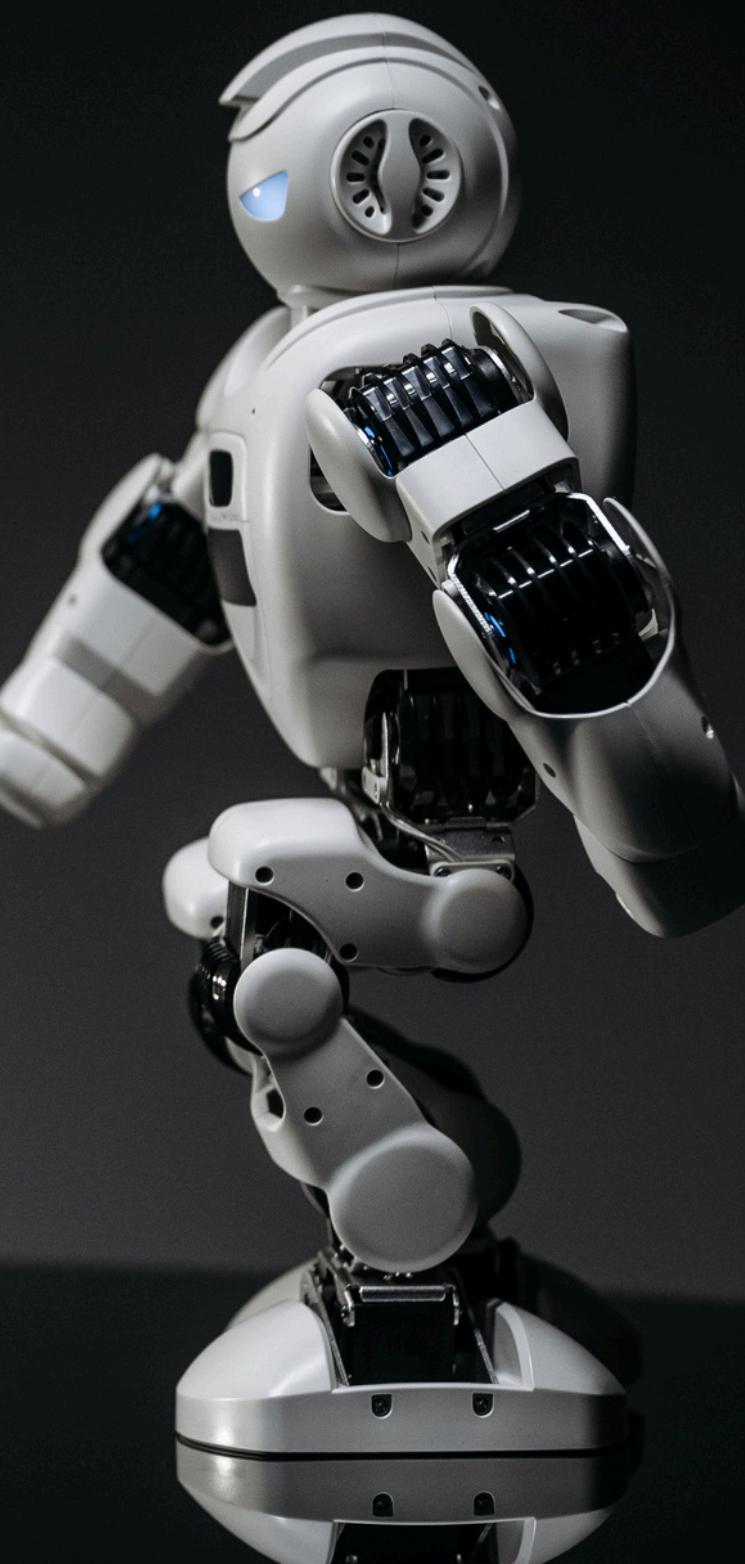


SARAS AI HACKATHON

TEAM : LLM-ITED AI-DITION

PROBLEM STATEMENT

- Traditional FAQ systems do not use intelligent search, which results in inefficient handling of user queries. Users often struggle to find relevant answers quickly.
- Need a **smart module** that returns precise, relevant answers
- Also efficiently handle **large** FAQ volumes with quick response times
- Must **integrate smoothly** into the SARAS AI Institute website

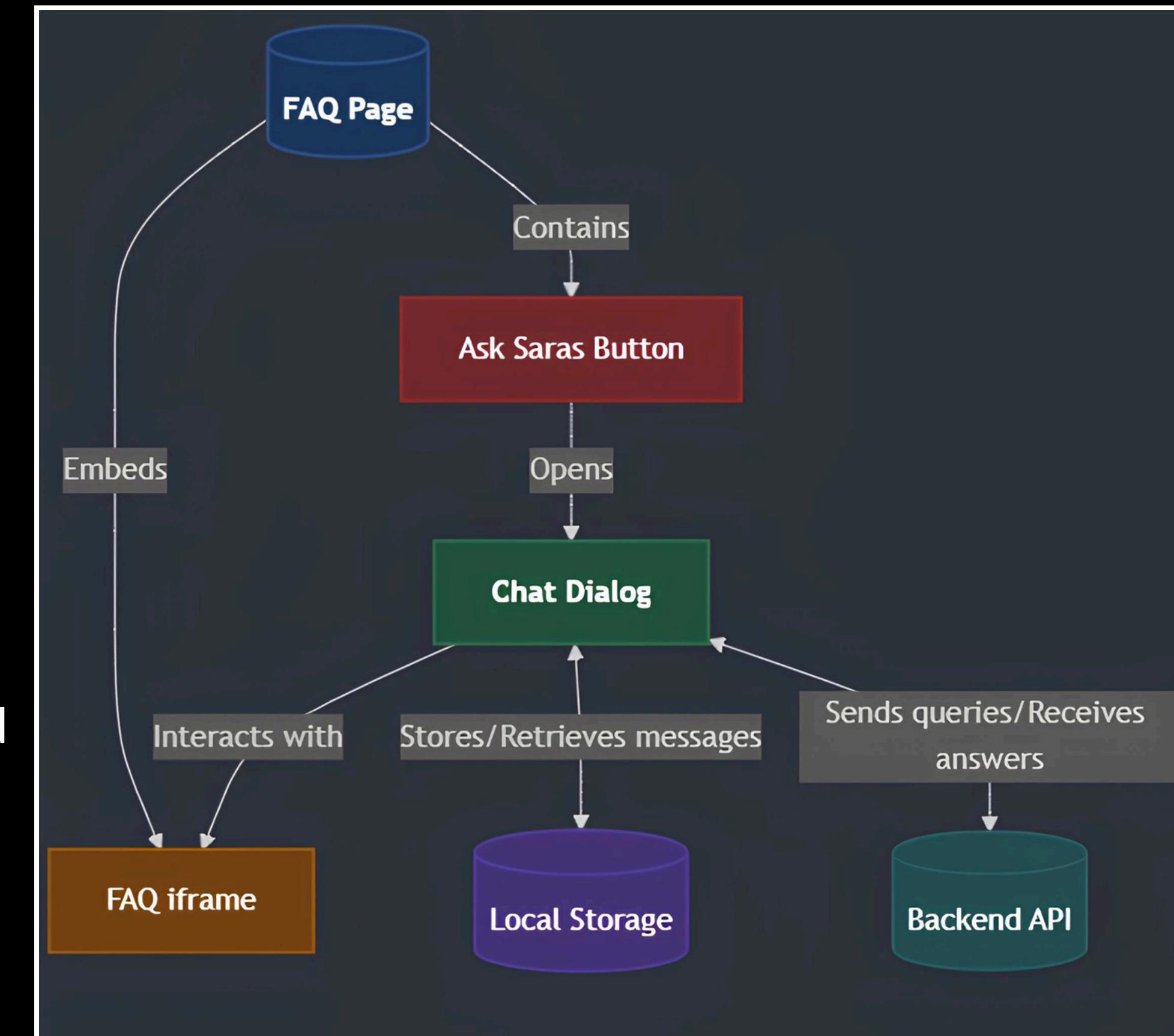


OUR APPROACH

- **Embedding Based Search** :- We used SentenceTransformers to generate embeddings for both FAQs and user queries, enabling semantic search instead of relying on traditional keyword searching.
- **Efficient Retrieval:** ChromaDB vector database ensures fast and accurate query matches.
- **Real-time Interaction:** FastAPI, deployed on an Azure EC2 machine and configured with an Apache server, handles backend requests and retrieves the top 5 FAQs
- **Seamless Integration:** The React frontend is embedded in the SARAS AI website by adding just two components, and we have provided the code in the README file
- **User-friendly:** Intuitive chatbot interface, delivering precise answers with minimal delay

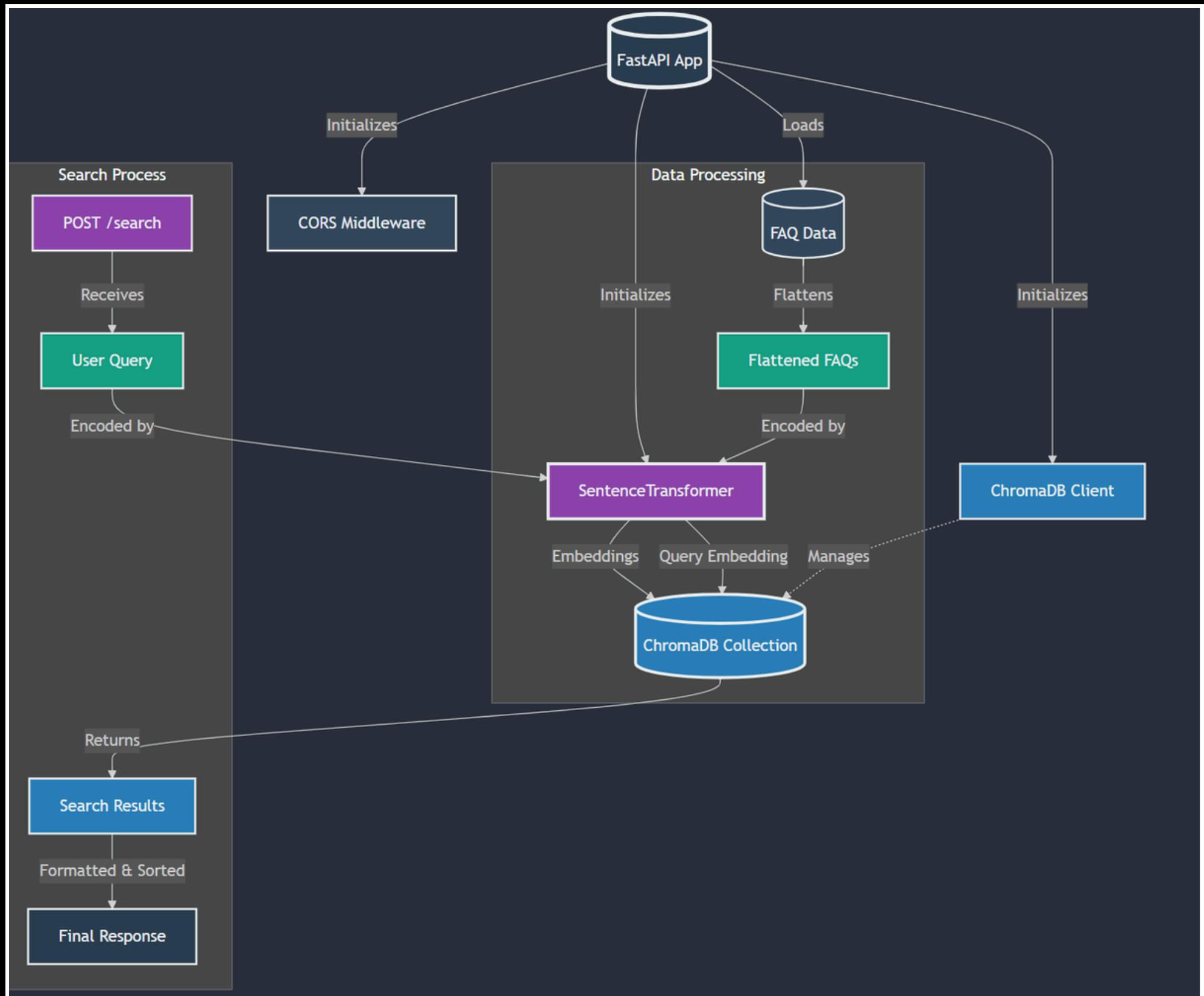
FRONTEND

- **User Interaction:** The user presses the “Ask SARAS AI” button opening the chatbot to input queries.
- **Responsive Display:** Top **three** most relevant answers are shown to the user.
- **Frontend Stack:** The Chatbot frontend is built with **React** and deployed on **Vercel** with special attention being put for a **seamless integration** with the SARAS AI website.



BACKEND

- The query is sent to the <https://backendapi.centralindia.cloudapp.azure.com/search> endpoint, where FastAPI is deployed on an **Azure EC2** instance configured with an Apache server
- It takes the query, embeds it, and searches through the **ChromaDB** database where the FAQs are stored as embeddings.
- It retrieves the top five FAQs, which are then sent to the frontend for rendering.



HERE'S THE DEMO...



Home Programs Admissions About us FAQ Contact us

↗ Apply Now

Frequently Asked Questions

Whether you're a prospective student looking for program details, a parent seeking information about our curriculum, or a current student with inquiries about your studies, we're here to help.

Admissions

Curriculum and Faculty

Accreditation & Recognition

Career Services

Tuition fee and Scholarships

Admissions

What is the process for admission into Saras AI Institute? +

Is there an application fee for applying to Saras AI Institute? +

What is pre-enrollment assessment test? How do I prepare for it? +

Ask Saras AI

Saras AI FAQ

sarcv2-frontend.vercel.app

Incognito

New Chrome available :

Ask Saras AI

Hi! I am Saras trained on FAQ's. Ask me anything related to FAQ's, I will give you relevant answers.

EXAMPLE QUESTIONS

Is it possible to interact with mentors outside of class sessions?

Are scholarships offered at Saras AI Institute, and how do I apply?

Can you describe the structure of the curriculum at Saras AI Institute?

Ask a question...

Send



Ask Saras AI



Hi! I am Saras trained on FAQ's. Ask me anything related to FAQ's, I will give you relevant answers.

[Tell me about the admission process](#)

The admission process at Saras AI Institute typically involves submitting the online application form along with necessary details, followed by a quick pre-Enrollment assessment to evaluate your candidature based on your personal traits and basic communication skills in English.

Category: Admissions

Question: What is the process for admission into Saras AI Institute?

To be a successful professional in AI, you need to possess basic mathematical proficiency - which can be demonstrated by your math scores in high school or beyond. At Saras, you learn with global peers and faculties and should possess basic communication skills in English. These make up for the basic eligibility criteria

Category: Admissions

Question: Are there any specific requirements or prerequisites for admission into the programs?

Yes, we assist students in finding internships by connecting them with potential employers and offering guidance on applications and interviews.

Category: Career Services

Ask a question...

Send

FUTURE IMPROVEMENTS

- **Using a Proprietary LLM:** If we had access to an **LLM API key**, our idea is to send the top three query answers to the LLM for **summarization**, and return a response that includes the source links to the FAQs along with a summarized response.
- **Enhanced Query Matching:** Another improvement that we would have done is to send the user's query to the LLM to retrieve similar questions, attach these questions, and then embed them then search improving the response accuracy.
- We would have implemented all of these features if we had access to an LLM API key. The infrastructure is **already in place**, and it would only require a simple backend function update to implement these improvements.

THANK YOU



TEAM MEMBERS :
SREEHARI NALLAPANENI
SAJJAD NAKHWA
YASHASVEE TAIWADE
