

AI-Powered Student Assistance Chatbot for Technical Education, Government of Rajasthan.(1631)

ANISTAR

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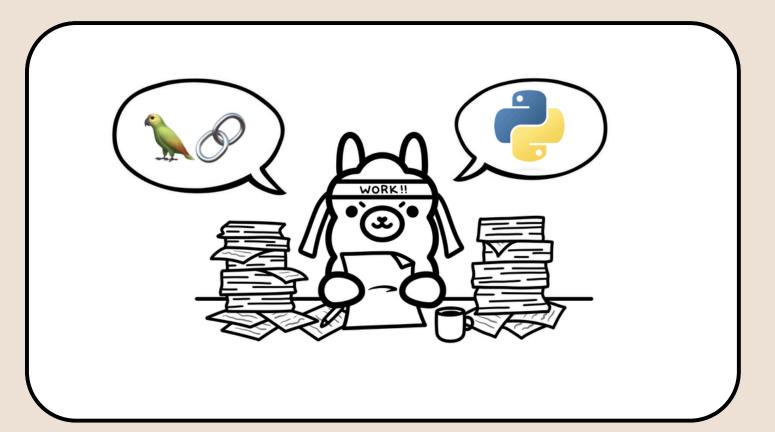
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Tech Stack



- Langchain
- Ollama
- Next.js
- Node.js
- Express.js
- MongoDB



Proposed Solution

• User interface

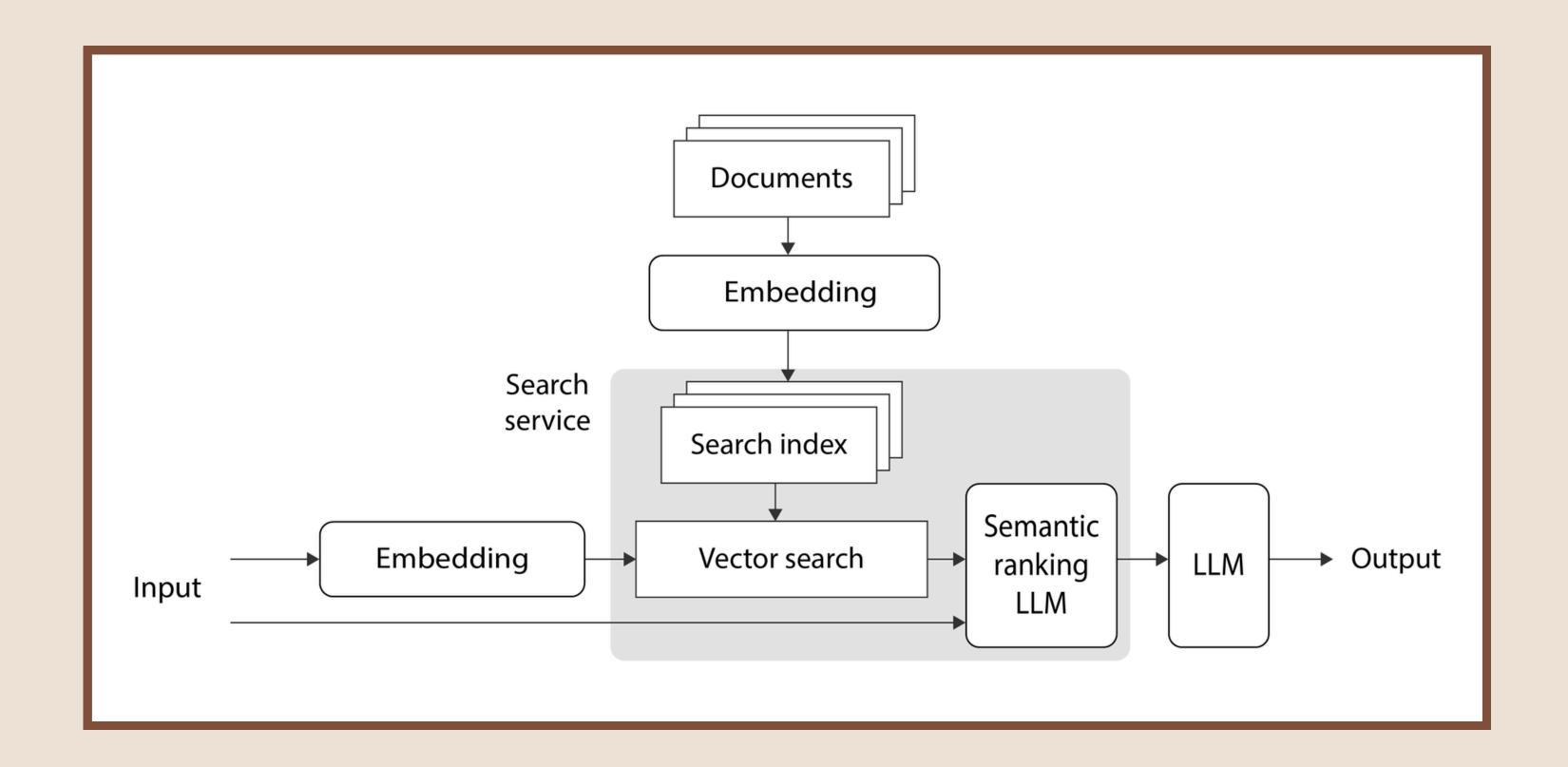
- Responsive UI, ensuring it works seamlessly on various devices, including smartphones, tablets, and desktops.
- Created a user-friendly interface for the chatbot.
- The interface is designed to display a set of pre-presented FAQs, offering quick access to common questions.
- Users can interact with these FAQs or type their queries
- At the start of the interaction, users can easily select their preferred language, whether Hindi or English, ensuring a personalized experience from the very beginning.

Proposed Solution

• AI/ML

- Gathered all the relevant information about admission, colleges, fees etc. This includes text documents, FAQs etc.
- Chose a **RAG** model to ensure efficient and accurate information retrieval for the chatbot.
- Designed the chatbot interface to support both Hindi and English, allowing users to select their preferred language or automatically switching based on their input.
- When a query is received, it is passed to the RAG model, which retrieves relevant data from the pre-existing PDF documents. The model then generates a coherent and informative response, tailored to the user's language preference.
- The response not only addresses the user's immediate query but also provides context and additional insights where applicable.

Proposed Solution



Business Model

- Subscription Fees: Regular payments from educational institutions for using the chatbot service.
- Licensing: Fees for integrating the chatbot into institutional websites or internal systems.
- Premium Features: Charges for advanced capabilities such as detailed analytics, custom reporting, or enhanced language support.
- Usage-Based Fees: Charges based on the volume of queries or interactions handled by the chatbot.
- Consulting Services: Fees for providing expert advice on chatbot implementation and optimization.

USP

Data-Driven Insights

• Provides valuable analytics and insights into user interactions, helping institutions identify trends, common concerns, and areas for improvement.

Multilingual Support

• Offers assistance in Hindi, English and regional languages.

24/7 Availability

• Provides round-the-clock assistance, ensuring that users can get answers to their queries at any time, without waiting for office hours.

USP

Seamless Integration

• Can be integrated with existing institutional systems and platforms, ensuring smooth deployment and operation.

Cost-Effective

• Offers a cost-effective solution compared to traditional methods of managing inquiries, such as phone calls, emails, or in-person visits.

Reduced Workload

 Automates responses to common queries, freeing up institutional staff to focus on more complex and critical tasks.