## IBM AICTE INTERSHIP AI PROJECT

## **COLLEGE ADMISSION AGENT**

Student name : Aditya Sharma

College Name & Department : Maulana Azad National Institute of

**Technology & Computer Science** 



### **OUTLINE**

- Problem Statement
- Technology used
- Wow factor
- End users
- Result
- Conclusion
- Git-hub Link
- Future scope
- IBM Certifications



## PROBLEM STATEMENT

The college admission process is often overwhelming and confusing for prospective students due to scattered information, unclear eligibility criteria, and delayed responses from institutions. Admission offices are burdened with repetitive queries related to course offerings, fees, application deadlines, and documentation, which slows down the overall process and negatively impacts the student experience. There is a lack of a centralized, real-time, and reliable system that can provide accurate and personalized admission guidance to applicants.

#### Proposed Solution:

To address this, we developed a College Admission Agent powered by RAG (Retrieval-Augmented Generation) using IBM Granite and IBM Cloud Lite services. The system retrieves relevant information from institutional documents, FAQs, and policy manuals, and then uses a powerful language model to generate accurate, real-time answers to natural language queries from students. The assistant provides guidance on course selection, eligibility, fee structure, important dates, and application procedures. This Al-driven solution enhances transparency, reduces manual workload, and significantly improves the admission experience for students and institutions alike.



## TECHNOLOGY USED

- IBM cloud lite services
- Natural Language Processing (NLP)
- Retrieval Augmented Generation (RAG)
- IBM Granite model



#### **IBM CLOUD SERVICES USED**

- IBM Cloud Watsonx AI Studio
- IBM Cloud Watsonx AI runtime
- IBM Cloud Agent Lab
- IBM Granite foundation model



### **WOW FACTORS**

- The agent uses Retrieval-Augmented Generation (RAG) to give real-time responses based strictly on verified admission documents no guesswork. Unique features:
- Uses IBM's powerful enterprise-grade LLM for generating high-quality, factual, and contextaware answers
- Gives user-specific information based on course, category, and exam score almost like a personal admission counselor
- Can be deployed as a chatbot on college websites or messaging platforms like WhatsApp and Telegram.
- Recommendation of research papers based on a user's current topic
- Trend analysis over time for specific keywords or domains.
- With minor tweaks, the system can be scaled to serve multiple colleges or even a centralized education portal.

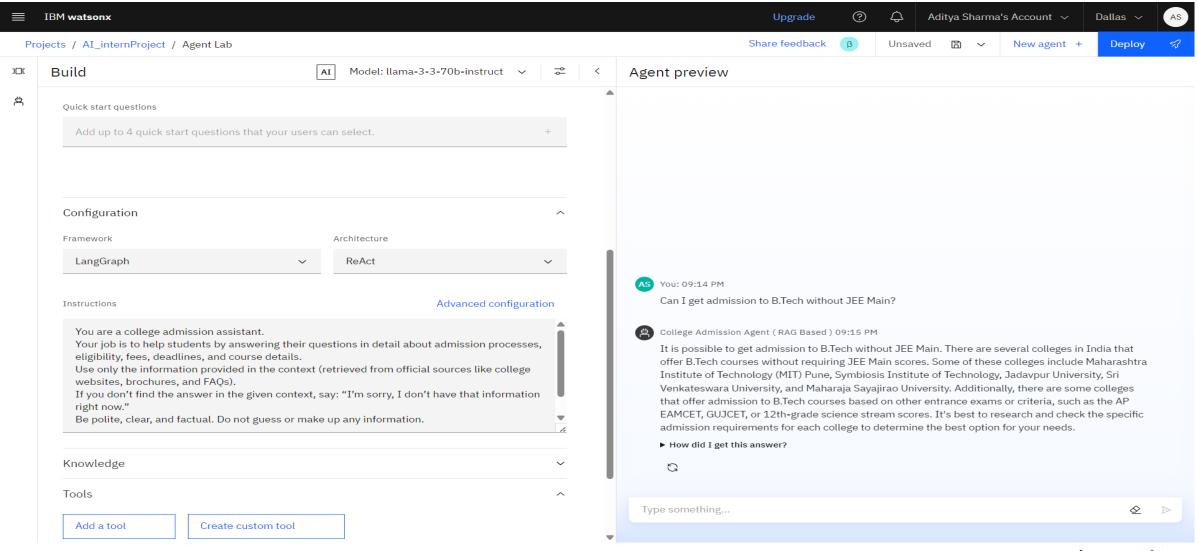


#### **END USERS**

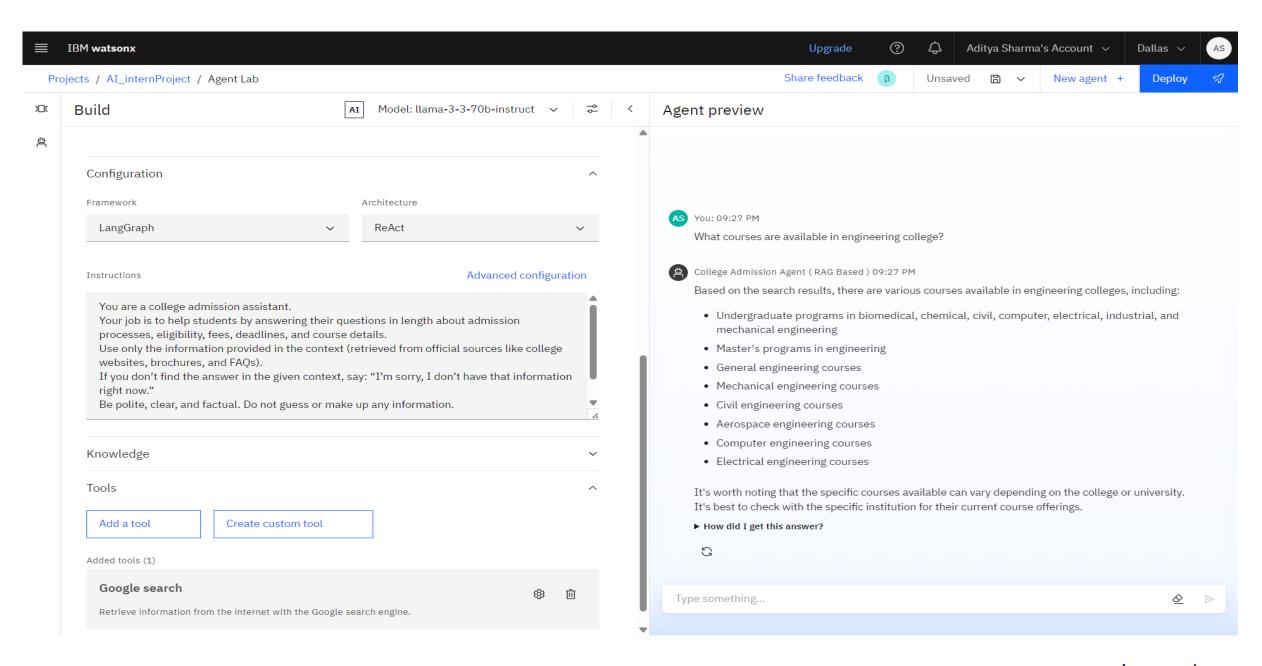
- Academic Researchers
- Prospective Students
- Research Institutions and Universities
- School Counselors and Career Advisors
- Parents and Guardians
- Education Consultants and Agencies



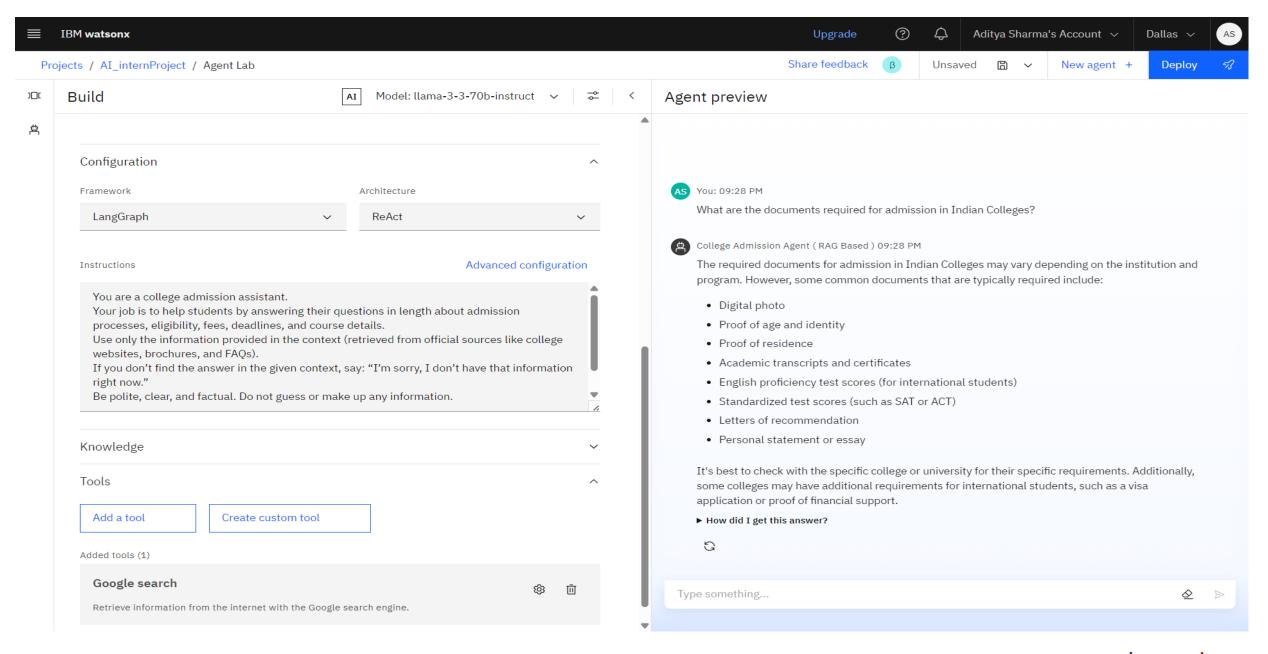
#### **RESULTS**



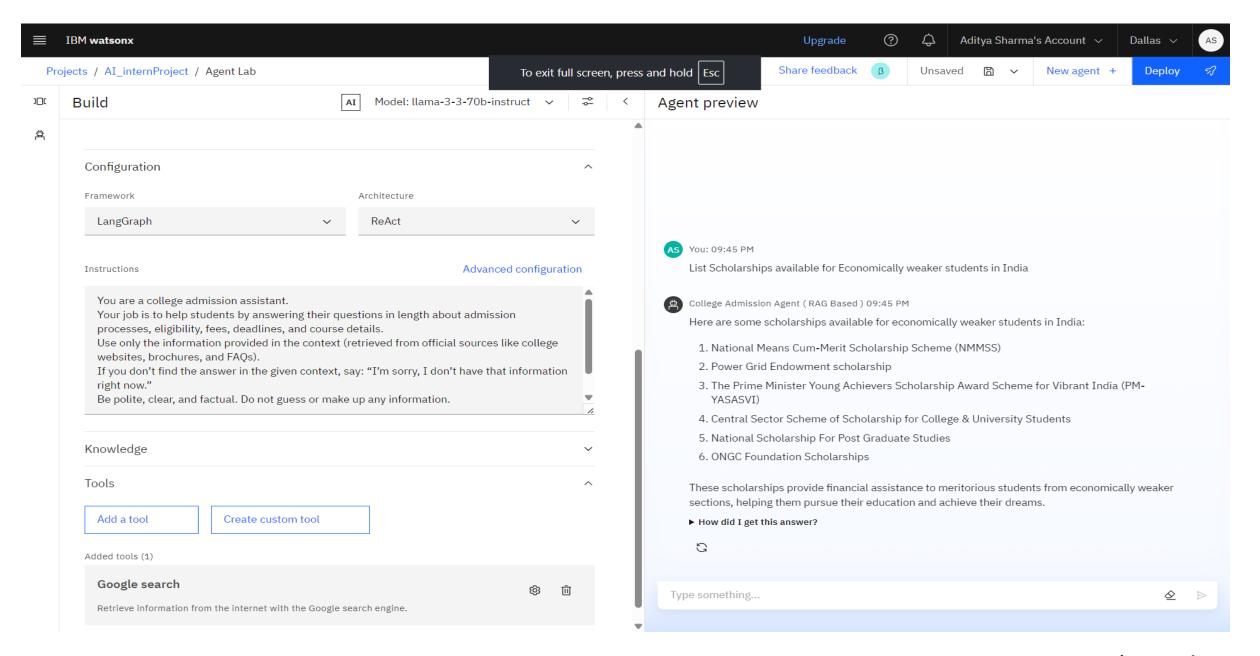






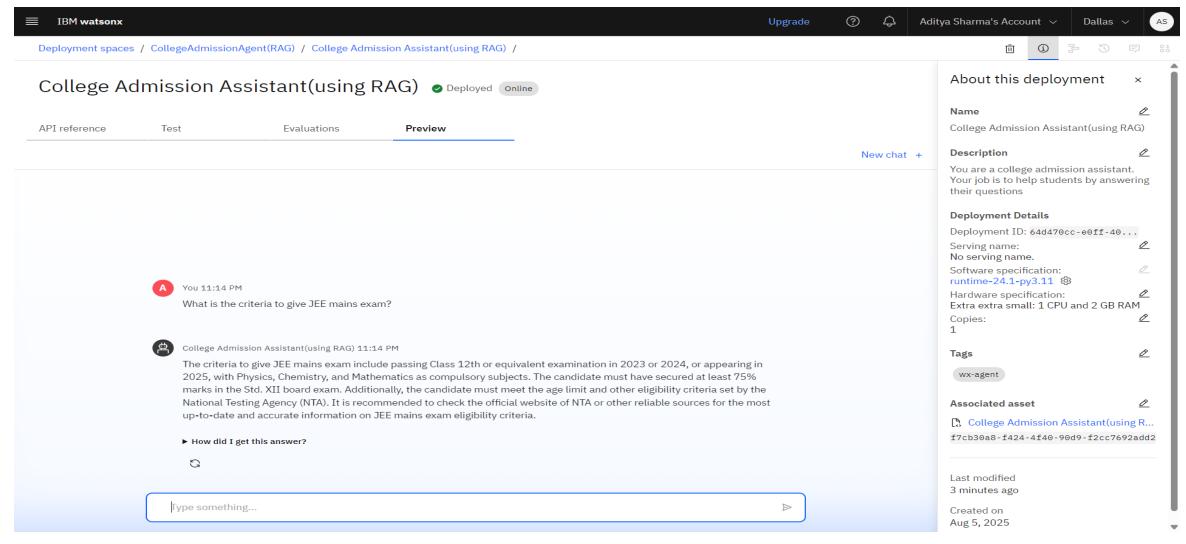








## **RESULTS** (Deployed Al Agent)





#### CONCLUSION

- The project successfully streamlines the college admission process by providing instant, accurate, and contextual responses to student queries.
- By combining document retrieval with generative AI, the system delivers trustworthy, real-time information from official sources.
- The agent reduces the burden on administrative staff by handling frequently asked questions automatically.
- The system is scalable and can be easily integrated with college websites, chat platforms, or mobile apps.



## **FUTURE SCOPE**

- Multilingual Support
- Voice-Activated Research Assistant
- Real-Time Notification Feature
- Integration with Whatsapp and telegram
- Scholar Finder
- Document Upload & Verification
- Parent and Counselor Modes



#### **IBM CERTIFICATIONS**

In recognition of the commitment to achieve professional excellence



# Aditya Sharma

Has successfully satisfied the requirements for:

#### Getting Started with Artificial Intelligence



Issued on: Jul 23, 2025 Issued by: IBM SkillsBuild

Verify: https://www.credly.com/badges/bf1634e6-53e5-4bab-81ae-a58408da6fb5





In recognition of the commitment to achieve professional excellence



# Aditya Sharma

Has successfully satisfied the requirements for:

Journey to Cloud: Envisioning Your Solution



Issued on: Jul 24, 2025 Issued by: IBM SkillsBuild







#### IBM SkillsBuild

#### **Completion Certificate**



This certificate is presented to

Aditya Sharma

for the completion of

# Lab: Retrieval Augmented Generation with LangChain

(ALM-COURSE\_3824998)

According to the Adobe Learning Manager system of record

Completion date: 24 Jul 2025 (GMT)

Learning hours: 20 mins



Github link: https://github.com/AdityaSh42/CollegeAdmissionAgent



## **THANK YOU**

