CAPSTONE PROJECT

COLLEGE ADMISSION AGENT

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OUTLINE

- Problem Statement
- Technology used
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- IBM Certifications



PROBLEM STATEMENT

A College Admission Agent, powered by RAG (Retrieval-Augmented Generation), streamlines the student admission process. It retrieves and summarizes admission policies, eligibility criteria, and FAQs from institutional databases and official sources. Prospective students can ask natural language questions and receive accurate, up-to-date responses instantly. The agent helps with course selection, application guidance, fee structure, and important deadlines. Using trusted, realtime data, it reduces manual inquiries and enhances applicant experience. This Al-driven assistant boosts transparency, accessibility, and efficiency in college admissions.



TECHNOLOGY USED

IBM cloud lite services

Natural Language Processing (NLP)

Retrieval Augmented Generation (RAG)

IBM Granite model



IBM CLOUD SERVICES USED

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



WOW FACTORS

2 1. Al-Powered Instant Clarity on Admissions

 Uses natural language processing with RAG (Retrieval-Augmented Generation) to deliver accurate, contextual answers to student queries — no more hunting through PDFs or outdated webpages.

Q 2. Real-Time Retrieval from Trusted Sources

- Dynamically pulls data from institutional databases, government portals, and official sites, ensuring students receive real-time, verified information a critical advantage in ever-changing admission cycles.
- ☐ 3. Powered by IBM Granite + Cloud Lite Integration
- Built using IBM Granite LLM for robust multilingual understanding and summarization.
- Hosted and scaled using IBM Cloud Lite services, ensuring cost-effectiveness and ease of deployment.

4. Personalized Course and College Recommendations

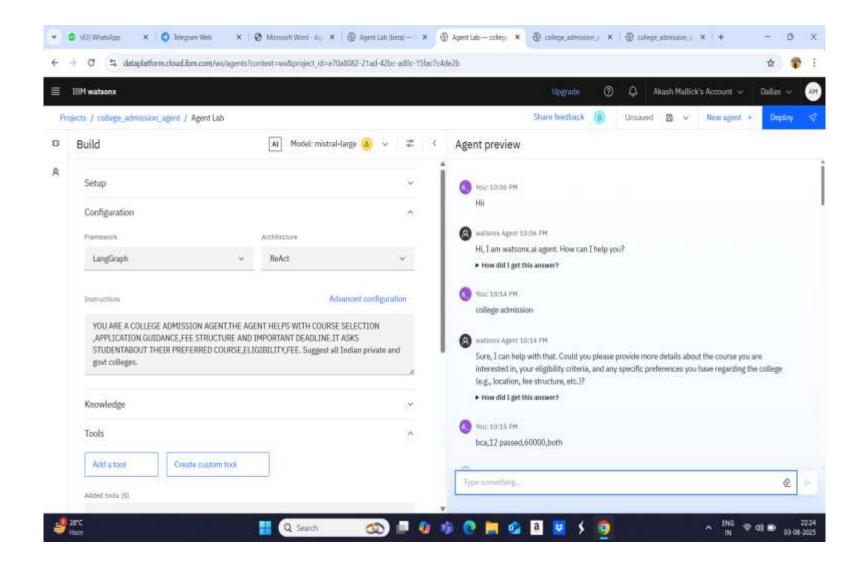
- Suggests best-fit colleges and programs based on user interests, grades, goals, and eligibility acting like a virtual admission counselor.
- 8. 24/7 Intelligent Assistant
- Always available, scalable chatbot reducing manual staff load by automating 80%+ of common inquiries.



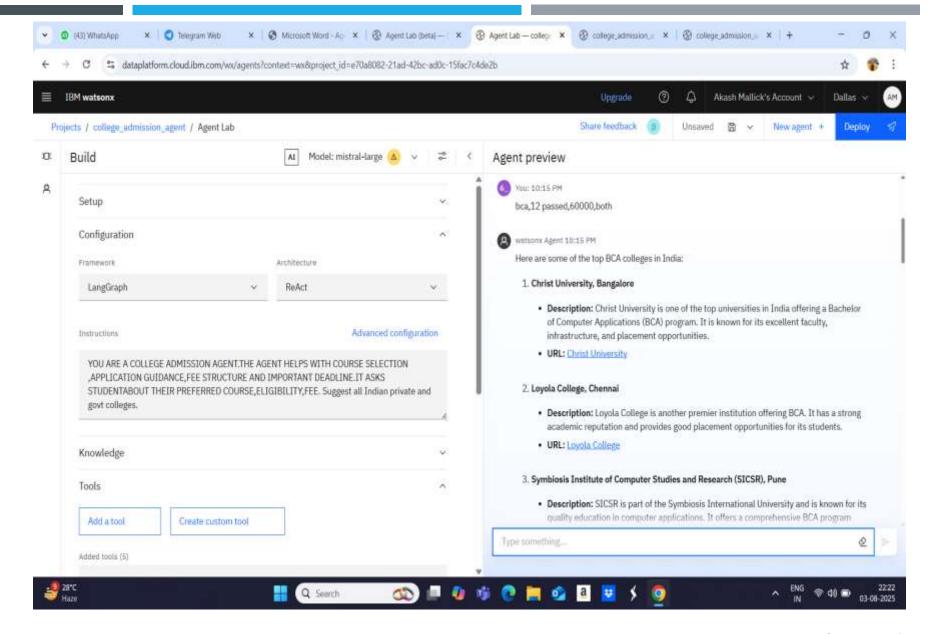
END USERS

- Prospective Students (Domestic & International)
- Parents and Guardians
- High School Counselors & Career Advisors
- Education Consultants & Agents
- College Admission Officers
- Government & Accreditation Bodies

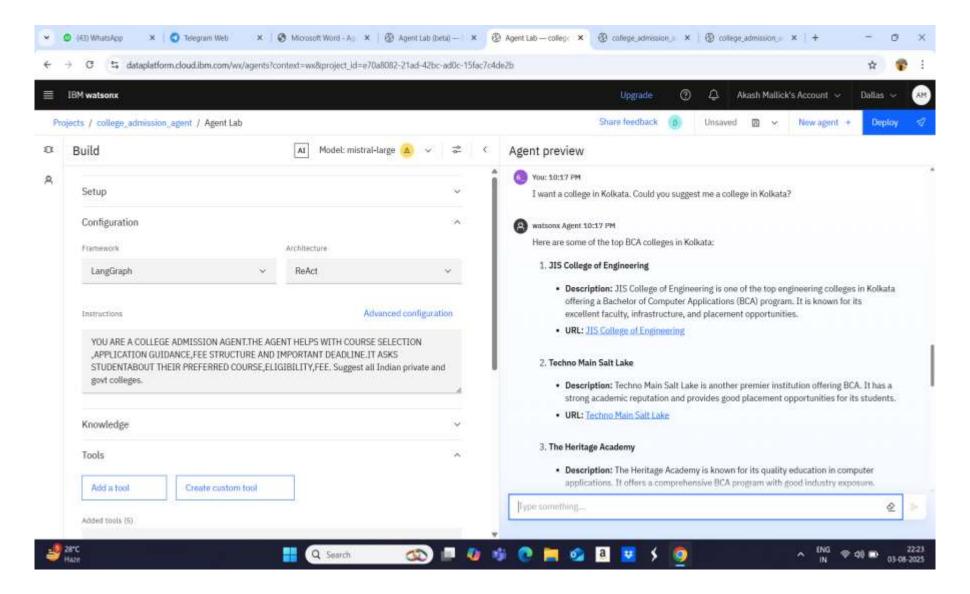






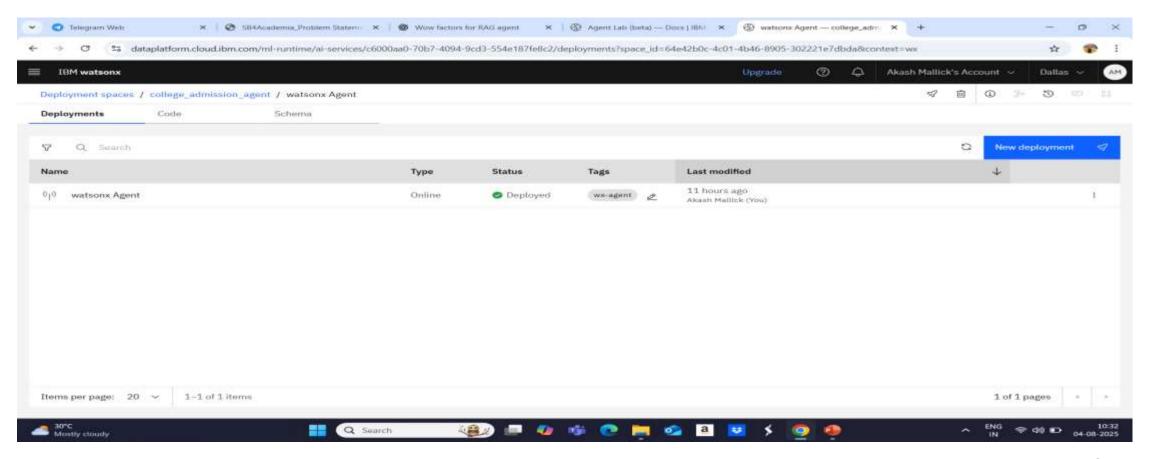








Deployed AI Agent





CONCLUSION

- The College Admission Agent, powered by Retrieval-Augmented Generation (RAG) and built on IBM Cloud Lite and IBM Granite, represents a transformative leap in the higher education admission landscape. By providing accurate, real-time, and personalized responses to admission-related queries, the agent empowers students with clarity, confidence, and control over their academic futures.
- This Al-driven assistant not only simplifies and accelerates the application process for students but also alleviates the workload of admission offices, enabling institutions to focus on strategic outreach and support. With enhanced transparency, improved accessibility, and scalable automation, the solution addresses key pain points in the traditional admission journey.
- In an increasing competitive and data-driven education environment, this smart, cloud-based agent positions institutions at the forefront of digital innovation — making admissions more inclusive, efficient, and futureready.



FUTURE SCOPE

- Integration with Application Portals
- Multilingual and Voice Support
- Predictive Analytics & Decision Support
- Dashboard for Institutions
- Global Expansion
- Collaboration with EdTech Platforms
- Smart Scholarship Matching



IBM CERTIFICATIONS

In recognition of the commitment to achieve professional excellence



Akash Mallick

Has successfully satisfied the requirements for:

Getting Started with Artificial Intelligence



Issued on: Aug 27, 2024 Issued by: IBM SkillsBuild

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Completion Certificate | SkillsBuild

IBM SkillsBuild

Completion Certificate



This certificate is presented to

Akash Mallick Mallick

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



THANK YOU

