#### **CAPSTONE PROJECT**

#### **COLLEGE ADMISSION AGENT**

**Presented By:** 

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College Name & Department: University of Madras, BCA



#### **OUTLINE**

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



#### PROBLEM STATEMENT

The traditional college admission process is often overwhelmed with a large volume of manual inquiries from prospective students regarding eligibility, course selection, application deadlines, and fee structures. This leads to inefficiencies, delays in communication, and inconsistent dissemination of information. There is a need for an intelligent and scalable solution that can streamline the admission process while ensuring accuracy, transparency, and real-time availability of information.

#### **Proposed Solution:**

The proposed solution is an Al-powered College Admission Agent that leverages Retrieval-Augmented Generation (RAG) to assist students during the admission process. This intelligent agent retrieves and synthesizes data from official institutional sources, such as admission guidelines, program brochures, FAQs, and eligibility documents. It provides natural language responses to user queries in real time.



#### **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**

**Powered by RAG**: Combines the precision of retrieval-based systems with the generative power of LLMs.

**Multilingual Natural Language Support**: Offers inclusive accessibility for diverse student demographics.

**24/7 Availability**: Functions round the clock, unlike traditional helpdesks.

Personalized Interaction: Offers tailored guidance based on user profile.

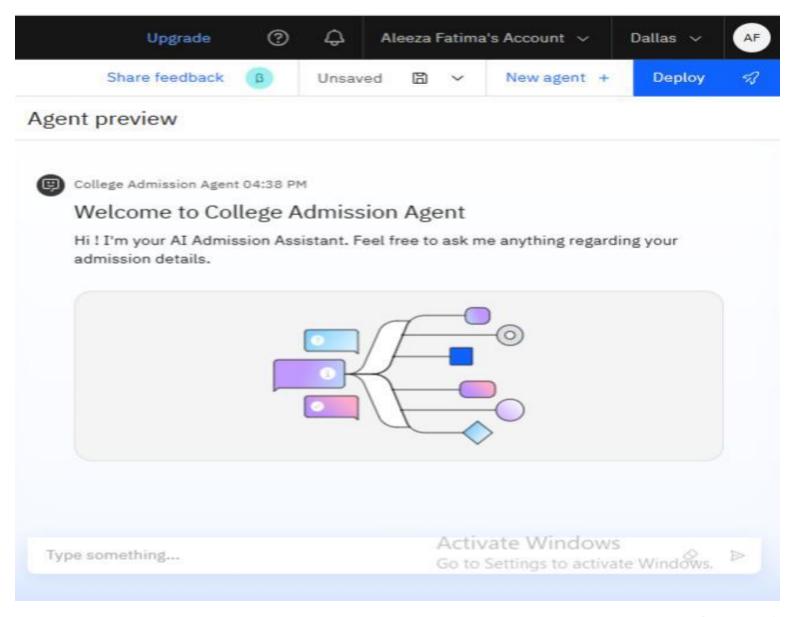
**Low-Cost Deployment**: Can run on IBM Cloud Lite, ensuring affordability for educational institutions.



#### **END USERS**

- Prospective Students: Primary users seeking accurate and fast information about admissions.
- Parents/Guardians: Looking for fee structure, eligibility, and admission timelines.
- Educational Institutions: Benefit from reduced manual workload and better communication management.
- Career Counsellors: Use it to guide students efficiently during the counselling process









You: 12:03 AM

please provide detailed fee structure for 3years bca program

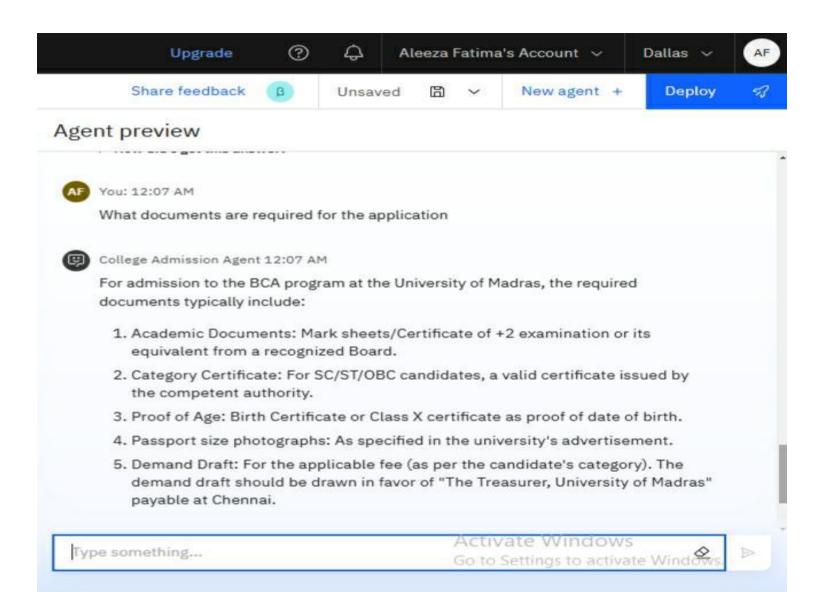


College Admission Agent 12:03 AM

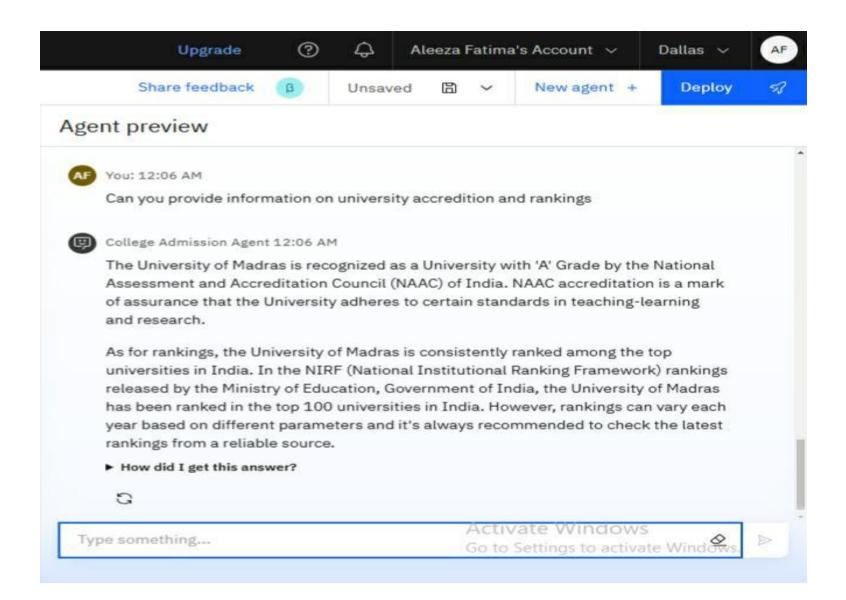
As per the latest information available, the tuition fee for the three-year BCA program at the University of Madras is as follows:

- For local candidates, the total fee for the entire three-year program is approximately INR 60,000.
- For non-local candidates, the total fee for the entire three-year program is approximately INR 120,000.



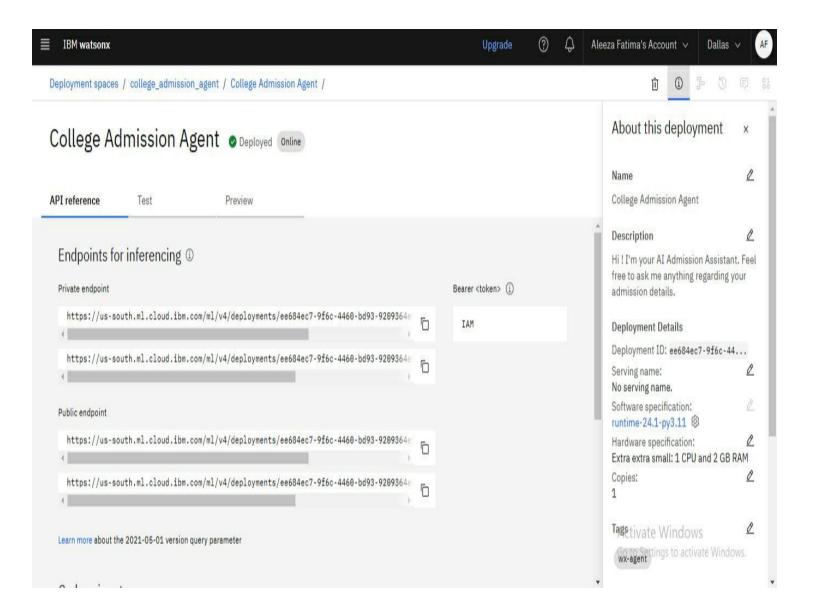








#### **Deployed AI Agent**





#### **CONCLUSION**

The AI-powered College Admission Agent brings a paradigm shift in how institutions interact with aspiring students. By automating and personalizing the admission support system, it improves transparency, reduces dependency on manual processes, and offers a more accessible and student-friendly interface. It acts as a single-window solution to all admission-related queries, thereby enhancing the overall user experience.



## **FUTURE SCOPE**

- Integration with Government Portals (e.g., AICTE, UGC) for real-time regulation updates.
- Document Upload & Validation: Accept and verify scanned documents using OCR and AI.
- Chatbot-to-Human Escalation: Provide live agent support for complex queries.
- Mobile App Support: Expand access via Android/iOS platforms.
- Data Analytics Dashboard: For institutions to gain insights into student interests and bottlenecks.
- Voice Assistant Integration: Enable voice-based interactions via Alexa, Google Assistant, or IVR.



#### **IBM CERTIFICATIONS**





# IBM SkillsBuild

#### Completion Certificate

This certificate is presented to

#### Aleeza Fatima

for the completion of

# Lab: Retrieval Augmented Generation with LangChain

(ALM-COURSE\_3824998)

According to the Adobe Learning Manager system of record

Completion date: 28-3ul 2025 (GHT)

Learning hours: 20 mins



In recognition of the commitment to achieve professional excellence



#### Aleeza Fatima

Has successfully satisfied the requirements for:

Journey to Cloud: Envisioning Your Solution



Issued on: Aug 13, 2025 Issued by: IBM SkillsBuild

Verify: https://www.credly.com/badges/b0cc3819-4dde-4bde-8d1c-76912bdebd10





#### **GITHUB LINK**

https://github.com/Aleeza786/college\_admission\_agent



# **THANK YOU**

