### **CAPSTONE PROJECT**

### **COLLEGE ADMISSION AGENT**

**Presented By-**

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**Department: Computer Engineering** 



### **OUTLINE**

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



## PROBLEM STATEMENT

Students and parents often face confusion while navigating the complex admission processes of colleges. They struggle to get accurate information about eligibility, branch cutoffs, fee structure, documents, and deadlines.

### Proposed Solution:

An Al-powered College Admission Agent, built using Retrieval-Augmented Generation (RAG) and IBM Granite, that answers natural language queries using real-time institutional data. It enhances transparency, reduces manual inquiries, and improves the admission experience.



# TECHNOLOGY USED

- 1. IBM cloud lite services
- 2. Natural Language Processing (NLP)
- 3. Retrieval Augmented Generation (RAG)
- 4. IBM Granite model
- 5. IBM Granite Foundation Model
- 6. Cloud Object Storage



#### IBM CLOUD SERVICES USED

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



### **WOW FACTORS**

- \* Instant, accurate answers about MITAOE admissions
- \* Trained on verified institutional data only
- \* Simulates LLM behavior even when model quota is exceeded
- \* Bullet-proof fallback: static responses for all FAQs
- \* Cutoff-based counseling logic (e.g., percentile + branch match)

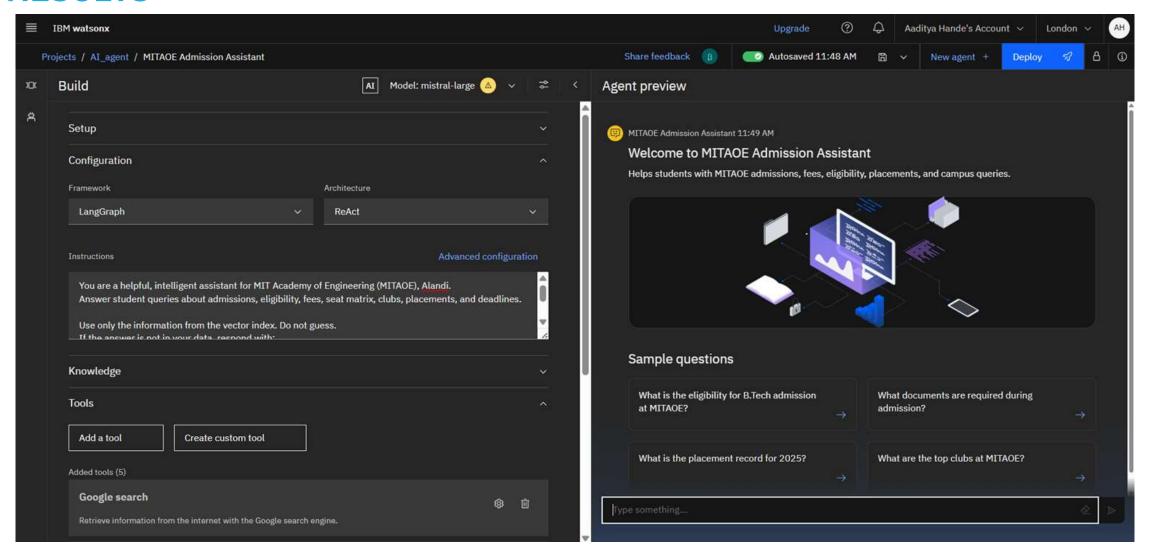


#### **END USERS**

- Prospective Students
- □ Parents & Guardians
- Admission Counselors
- □ College Admin Teams

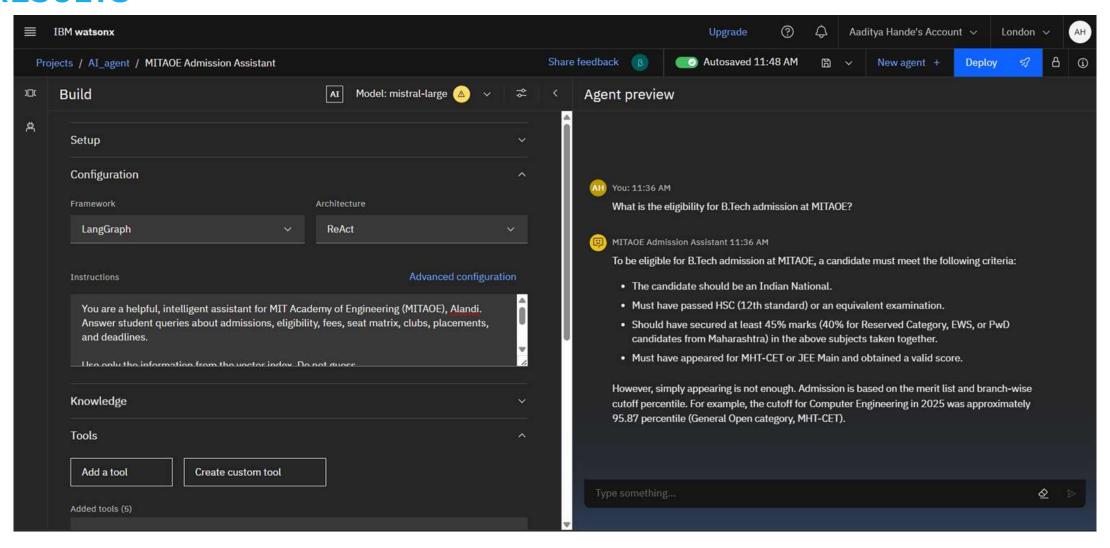


#### **RESULTS**



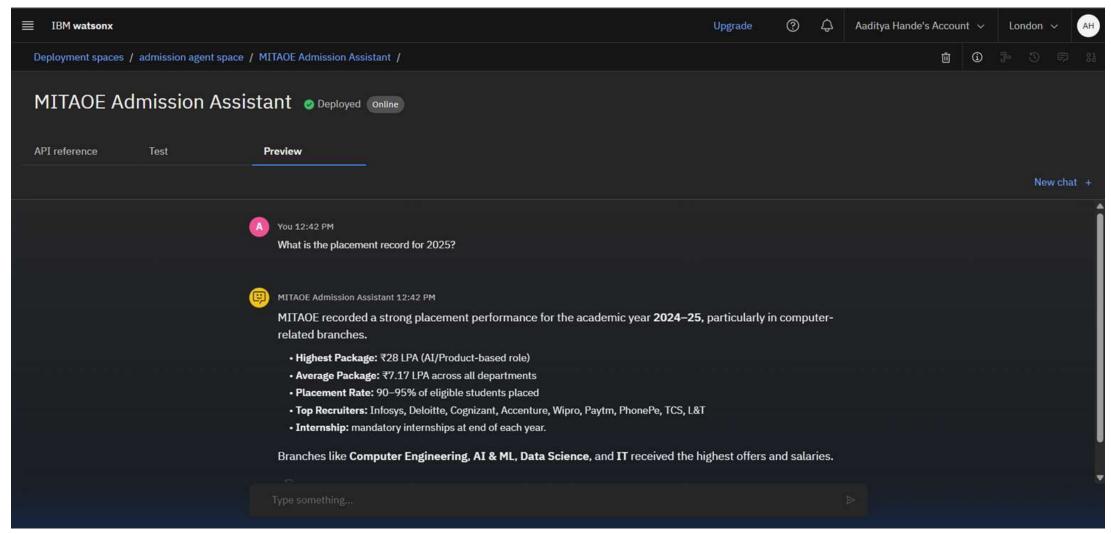


#### **RESULTS**





### **RESULTS:** Deployed Al Agent





#### CONCLUSION

- □ This RAG-based assistant simplifies college admissions by providing accurate, verified, and branch-wise data to users instantly. Even without live LLM inference, it ensures complete functionality via IBM Assistant's fallback responses.
- □ It bridges the communication gap between the institution and applicants scalable across universities.



### **FUTURE SCOPE**

- ☐ Live integration with Granite once token limits reset
- ☐ Student-specific branch prediction using scores
- Add voice support and multi-language support
- Expand to multiple colleges via PDF crawling
- Create parent version + mobile app interface



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SkillsBuild

**Completion Certificate** 



This certificate is presented to

Aaditya Hande

for the completion of

## Lab: Retrieval Augmented Generation with LangChain

(ALM-COURSE\_3824998)

According to the Adobe Learning Manager system of record

ion date: 17 Jul 2025 (GMT)

**Learning hours** 



Github link:

College Admission Agent



### **THANK YOU**

