IBM HACKATHON PROJECT

COLLEGE ADMISSION AGENT (RAG BASED)

Presented By

Student name: Paras Deepak Sheth

College Name: Dr. Babasaheb Ambedkar Technolgical University Lonere, Maharashtra

Department: Electronics and Telecommunications Engineering



OUTLINE

- Problem Statement
- Technology used
- Wow factor
- End users
- Result
- GitHub
- Conclusion
- Future scope
- IBM Certifications



PROBLEM STATEMENT

Students often face delays in getting answers to their queries.

Traditional support systems (email, helpdesk) are time-consuming.

Lack of real-time academic and administrative guidance.

Need for a smart, scalable, and always-available solution.



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 – NLP-based chatbot creation

IBM Cloud Watsonx Al runtime

IBM Cloud Agent Lab

IBM Granite foundation model



WOW FACTORS

- 24/7 Smart Student Support using Al
- Natural Language Understanding for better query handling
- Multi-language support (Optional)
- Scalable across all institutions under DTE
- Reduces human workload significantly



END USERS

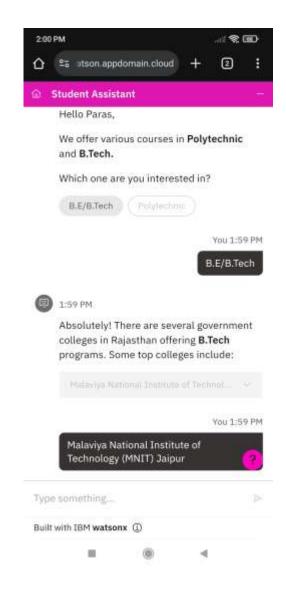
Students - For academic and campus-related help

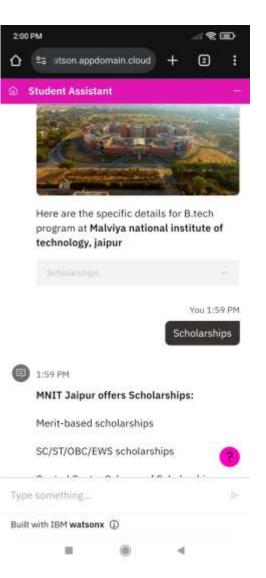
Faculty and Staff - To redirect common queries to the bot

DTE Rajasthan – For centralized student support management



RESULTS







RESULTS

Scan the QR code on mobile







GITHUB

https://github.com/Parasshet/student-assistant-chatbot



CONCLUSION

The chatbot provides a seamless support experience to students.

Enhances communication between students and administration.

Demonstrates how AI can automate and improve student services.



FUTURE SCOPE

Integrate with student management systems (ERP)

Add voice assistance using IBM Watson Speech APIs

Deploy across mobile platforms (Android/iOS apps)

Expand to other departments/universities



IBM CERTIFICATIONS

In recognition of the commitment to achieve professional excellence



Paras Sheth

Has successfully satisfied the requirements for:

Getting Started with Artificial Intelligence



Issued on: Jul 17, 2025 Issued by: IBM SkillsBuild

Verify: https://www.credly.com/badges/1a140224-e107-4933-9c5a-5634db1bd7a4



In recognition of the commitment to achieve professional excellence



Paras Sheth

Has successfully satisfied the requirements for:

Journey to Cloud: Envisioning Your Solution



Issued on: Jul 21, 2025 Issued by: IBM SkillsBuild

Verify: https://www.credly.com/badges/6be39b7e-bc58-47fe-8890-7b1110676f48



RAG LAB certificate

Completion Certificate IBM SkillsBuild This certificate is presented to Paras Sheth for the completion of Lab: Retrieval Augmented Generation with LangChain (ALM-COURSE_3824998) According to the Adobe Learning Manager system of record Completion date: 26 Jul 2025 (GMT) Learning hours: 20 mins



THANK YOU

