
IBM AICTE PROJECT

COLLEGE ADMISSION AGENT (RAG Based)


Built using IBM Cloud + Agentic AI with Retrieval-Augmented Generation

Student name : V S SHRILAKSHMI

College Name : Modern Education Society Wadia College of Engineering Pune

Department : ELECTRONICS & TELECOMMUNICATION

OUTLINE

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

PROBLEM STATEMENT

Manual admission processes are time-consuming and inefficient. Students often face:

- Difficulty understanding complex eligibility rules
- Lack of clear fee structure information
- Delays in getting responses to their queries
- Scattered or outdated information on websites

Traditional admission systems rely heavily on human staff, leading to:

- Increased workload
- Inconsistent communication
- Poor applicant experience

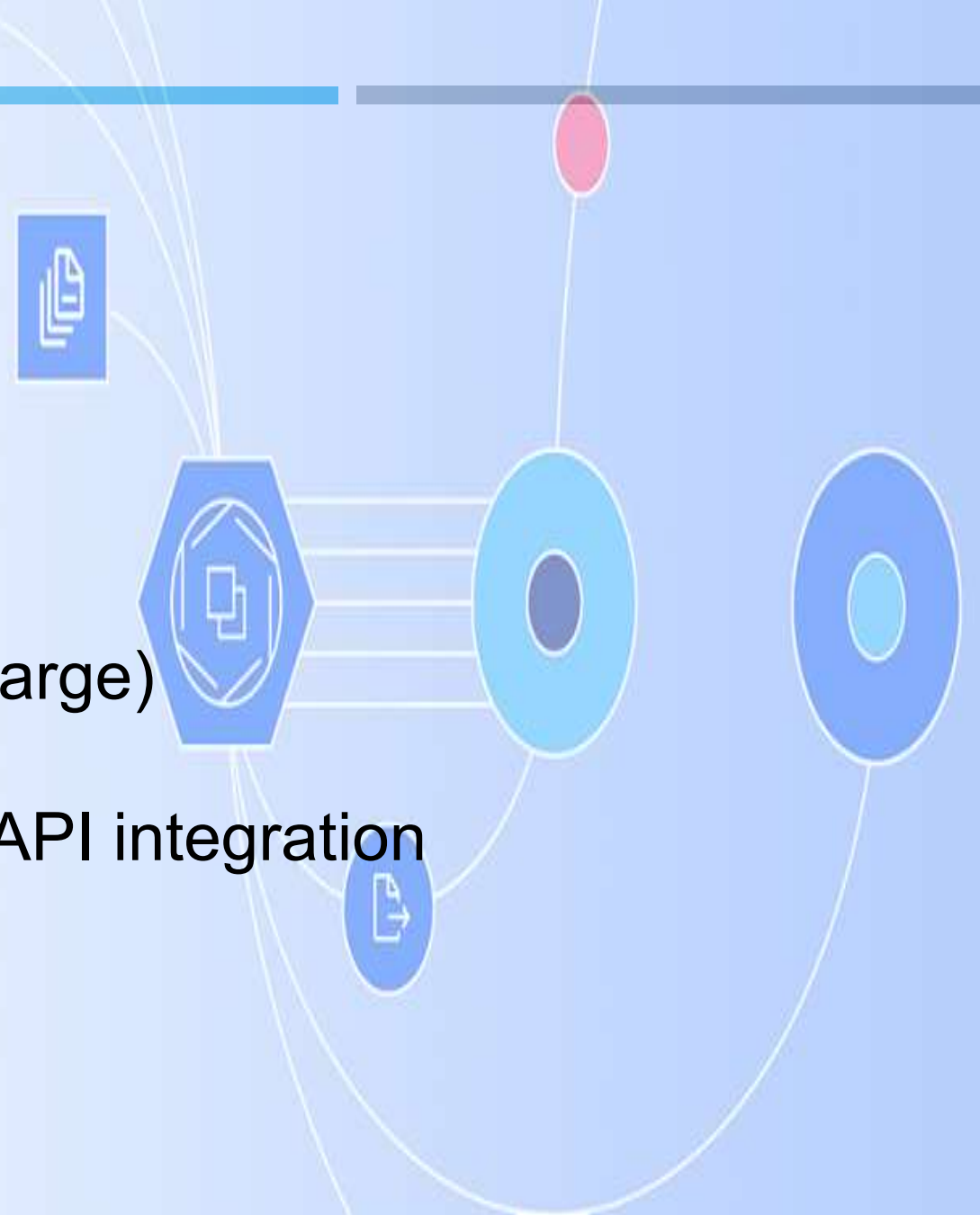


Proposed AI-Powered Admission Assistant :

- ◆ Built using **IBM Watsonx.ai, Granite/Mistral foundation models**, and **Cloud Object Storage**
- ◆ Uses **RAG (Retrieval-Augmented Generation)** to retrieve relevant answers from documents
- ◆ Trained on college brochures, FAQs, and policies
- ◆ Integrated into a user-friendly chat interface

TECHNOLOGY USED

- IBM Cloud Object Storage (Lite)
- Watsonx.ai Studio
- IBM Foundation Models (Mistral-Large)
- Agent creation, Deployment, and API integration



IBM CLOUD SERVICES USED

- IBM Cloud Watsonx AI Studio
- IBM Cloud Watsonx AI runtime
- IBM Cloud Object Storage
- IBM Cloud Agent Lab
- IBM Mistral model



IBM Cloud

WOW FACTORS

- 🔍 **Real-time Q&A** from actual brochures and policies
- 🧠 **RAG-powered answers** – accurate, no hallucination
- 🗝️ **Private & trusted data** (no external sources)
- ⚙️ **No-code agent creation** via IBM Watsonx Studio
- 🌐 **API-ready & easily deployable**
- 🏠 **Reusable across colleges** — just upload new docs

Unique features:

- 24/7 Student Support
- Reduces Admission Helpline Load
- Easy Access to Verified Info
- Personalized, Context-Aware Responses
- Scalable Across Institutions
- Agent is built, deployed, and tested **entirely within IBM Watsonx Studio** — no extra tools required!



END USERS

- **Prospective Students** – Get instant answers about admissions, eligibility, deadlines, and fees
- **Parents/Guardians** – Access clear info on application steps and scholarships
- **College Admission Officers** – Automate common queries, focus on complex cases
- **Counselors & Helpdesk Staff** – Use as a support tool during peak admission seasons



RESULTS

IBM watsonx

Upgrade ?

V S Shrilakshmi's Account

London

VS

Deployment spaces / College Admission Agent-Deployment / watsonx Agent /

watsonx Agent

Deployed Online


API reference Test Preview

New chat +

watsonx Agent 01:06 PM

Welcome to watsonx Agent

Change this description to reflect your particular agent



Type something...

RESULTS

The screenshot displays the IBM watsonx Agent web interface. At the top, a navigation bar includes the 'IBM watsonx' logo, an 'Upgrade' button, and user account information for 'V S Shrilakshmi's Account' in 'London'. Below the navigation bar, a breadcrumb trail shows 'Deployment spaces / College Admission Agent-Deployment / watsonx Agent /'. The main header area features the 'watsonx Agent' title with 'Deployed' and 'Online' status indicators. A tabbed interface at the bottom of the header shows 'API reference', 'Test', and 'Preview' (the active tab). On the right side of the chat area, there is a 'New chat +' button. The chat history shows a conversation where the user asks 'Which document do you have?' and the agent responds with 'ABC_College_Admission_Brochure'. The user then asks 'what are the eligibility criteria?' and the agent provides a detailed response under the heading 'Eligibility Criteria'. The response is divided into two sections: 'For Undergraduate Courses (B.Tech/B.Sc.):' and 'For Postgraduate Courses (M.Tech/M.Sc./MBA):', each with a bulleted list of requirements. At the bottom of the chat area, there is a text input field with the placeholder 'Type something...' and a send button.

IBM watsonx Upgrade V S Shrilakshmi's Account London VS

Deployment spaces / College Admission Agent-Deployment / watsonx Agent /

watsonx Agent Deployed Online

API reference Test **Preview**

New chat +

You 01:00 PM
Which document do you have?

watsonx Agent 01:00 PM
ABC_College_Admission_Brochure

You 01:00 PM
what are the eligibility criteria?

watsonx Agent 01:00 PM

Eligibility Criteria

For Undergraduate Courses (B.Tech/B.Sc.):

- Must have completed 10+2 (Science stream) with a minimum of 60% marks.
- For B.Tech: Qualifying score in JEE Main or state engineering entrance.

For Postgraduate Courses (M.Tech/M.Sc./MBA):

- Bachelor's degree in relevant field with minimum 55% aggregate.
- MBA: Score in CAT/MAT/CMAT or Institute Entrance Test.

Type something...

RESULTS

Deployed AI Agent

The screenshot displays the IBM watsonx Agent management console. At the top, the header includes the IBM watsonx logo, an Upgrade button, help and notification icons, and user account information for 'V S Shrilakshmi's Account' in the 'London' region. The breadcrumb trail indicates the current location: 'Deployment spaces / College Admission Agent-Deployment / watsonx Agent /'. The main section is titled 'watsonx Agent' and shows a 'Deployed' status with a green checkmark and an 'Online' badge. Below this, three tabs are visible: 'API reference', 'Test', and 'Preview', with the 'Preview' tab being the active one. The chat interface in the Preview tab shows a conversation history with a user and the watsonx Agent. The user's messages are: 'Which document do you have?' and 'what are the eligibility criteria?'. The Agent's responses are: 'ABC_College_Admission_Brochure' and an empty response box. A 'New chat +' button is located in the top right corner of the chat area.

IBM watsonx Upgrade ? ? V S Shrilakshmi's Account London VS

Deployment spaces / College Admission Agent-Deployment / watsonx Agent /

watsonx Agent Deployed Online

API reference Test **Preview**

New chat +

You 01:00 PM
Which document do you have?

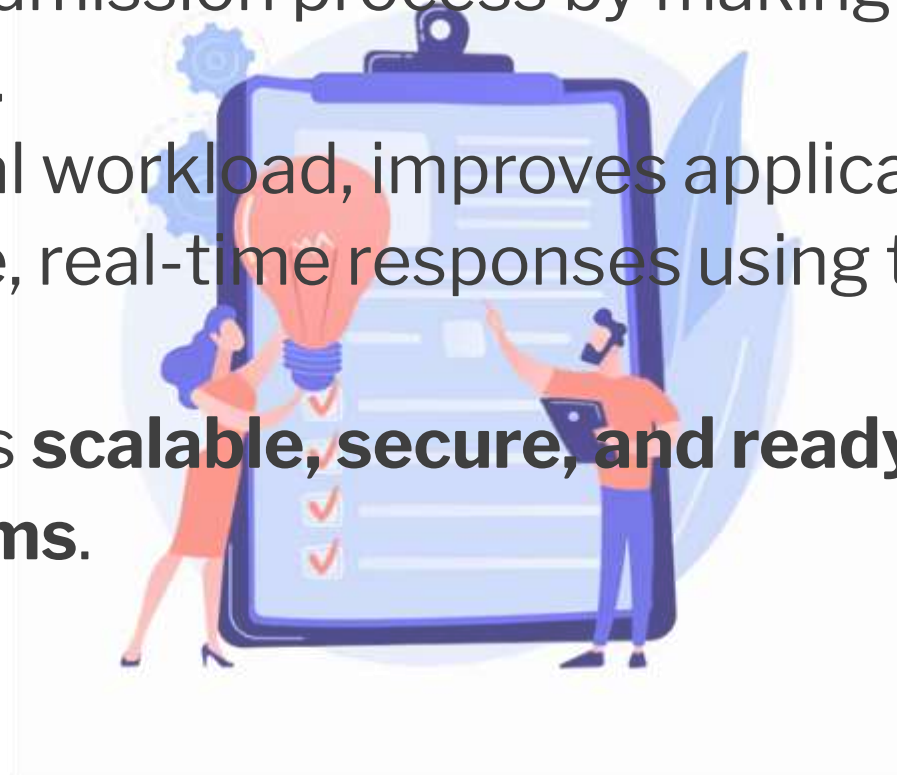
watsonx Agent 01:00 PM
ABC_College_Admission_Brochure

You 01:00 PM
what are the eligibility criteria?

watsonx Agent 01:00 PM
Type something...

CONCLUSION

- The College Admission Agent, built using IBM Watsonx and RAG, transforms the admission process by making it **faster, smarter, and more accessible**.
- It reduces manual workload, improves applicant experience, and ensures accurate, real-time responses using trusted institutional data.
- This AI solution is **scalable, secure, and ready to support modern education systems**.



FUTURE SCOPE

■ Multilingual Research Support

Assist students in regional and international languages.

■ Voice-Activated Research Assistant

Enable voice-based interactions for accessibility.

■ Form Filling Assistance

Guide students step-by-step through applications.

■ Integration with CRM/ERP

Sync with existing college management systems.



IBM CERTIFICATIONS

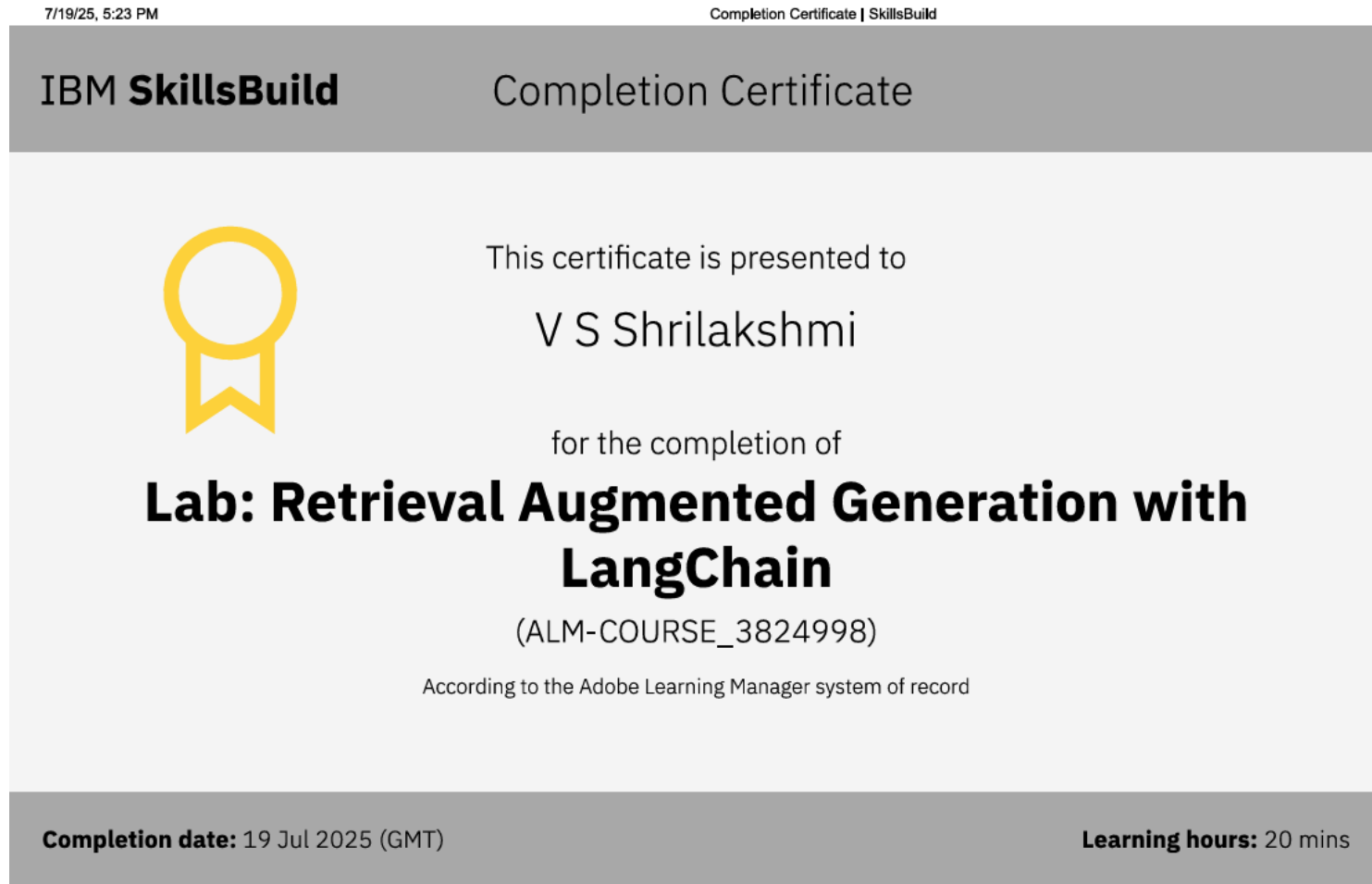
➤ Getting Started with AI



➤ Journey to cloud certificate



➤ RAG LAB certificate



GITHUB LINK



Github link :

https://github.com/Shrilakshmi248/College_Admission_AI_Agent.git

THANK YOU

