

IBM Watsonx.ai Project

INTERVIEW TRAINER AGENT

Presented By:

Student name : B . Kaarthika

**College Name & Department : Malla Reddy Engineering College
For Women – Computer Science And Engineering**

OUTLINE

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

PROBLEM STATEMENT

- Job seekers often feel unprepared for interviews because they don't know:
- What types of questions will be asked
- What kind of answers interviewers expect
- How to build confidence and improve soft skills
- Even experienced candidates struggle to tailor their preparation based on different job roles, companies, or levels of experience.

TECHNOLOGY USED

- IBM Cloud (Lite Services)
- IBM Watsonx.ai Runtime
- Retrieval-Augmented Generation (RAG)
- Vector Indexing
- IBM Granite

IBM CLOUD SERVICES USED

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

WOW FACTORS

- Personalized Q&A based on job title (e.g. “Java Developer – Fresher”)
- Pulls content from uploaded docs like InterviewTips, RoleQnA, etc.
- Can behave like a chatbot for live practice
- Offers both technical and behavioral questions
- Uses IBM’s Granite model for real-time, contextual answers
- Auto-generates suggestions for improvement

END USERS

- Freshers applying for internships and jobs
- Final year students preparing for campus placements
- Professionals switching domains (e.g. from Testing to DevOps)
- Training institutes and interview coaching centers

RESULTS

The screenshot displays the IBM watsonx Agent Lab interface. The browser address bar shows the URL: `au-syd.dai.cloud.ibm.com/wx/agents?context=wx&project_id=3df6b504-58c9-42ec-a0ea-132f9dc4f023`. The page header includes the IBM watsonx logo, an 'Upgrade' button, a user profile for 'Karthika Bondalapati's Ac...', and location 'Sydney'. The main navigation bar shows 'Projects / InterviewTrainerAgent / Agent Lab' and buttons for 'Share feedback', 'Unsaved', 'New agent', and 'Deploy'.

The interface is divided into two main sections: 'Build' and 'Agent preview'.

Build Section:

- Configuration:**
 - Framework: LangGraph
 - Architecture: ReAct
- Instructions:**

You are a helpful assistant that uses tools to answer questions in detail.
When greeted, say "Hi, I am watsonx.ai agent. How can I help you?"
- Knowledge:**
 - Vector Index: Trainer agent for interview
 - A vector index searches documents for relevant information to ground the model. Upload the files to index or select an existing index.
- Tools:**

Agent preview Section:

- Header: watsonx Agent 05:47 PM
- Message: Welcome to watsonx Agent
- Text: Change this description to reflect your particular agent
- Diagram: A flowchart showing a sequence of steps, with a magnifying glass icon highlighting a specific step.
- Input field: Type something...

The Windows taskbar at the bottom shows the date as 03-08-2025, time as 17:48, and weather as 31°C Partly sunny.

RESULTS

The screenshot displays the IBM Watsonx Agent Lab interface. The top navigation bar includes the IBM Watsonx logo, an 'Upgrade' button, a user profile for 'Karthika Bondalapati's Ac...', and location settings for 'Sydney'. The main header shows the project path 'Projects / InterviewTrainerAgent / Agent Lab' and buttons for 'Share feedback', 'Unsaved', 'New agent', and 'Deploy'.

The left sidebar is titled 'Build' and contains sections for 'Setup', 'Configuration', 'Instructions', 'Knowledge', and 'Tools'. Under 'Configuration', the 'Framework' is set to 'LangGraph' and the 'Architecture' is set to 'ReAct'. The 'Instructions' section contains the text: 'You are a helpful assistant that uses tools to answer questions in detail.' The 'Knowledge' section shows a 'Vector index' with the entry 'Trainer agent for interview' and a 'Clear chat' button. A note below states: 'If you want to add a vector index to the agent, clear the agent preview chat.'

The right panel, titled 'Agent preview', shows a chat history. The user's message is: 'I'm a fresher software developer. Ask me 3 technical questions.' The Watsonx Agent's response is: 'Here are 3 technical questions for a fresher software developer: 1. What are the four pillars of OOP? 2. Explain the difference between Java and Python. 3. What is a data structure? Name some types.' Below the response is a button labeled 'How did I get this answer?'. At the bottom of the chat is a text input field with the placeholder 'Type something...' and a send button.

RESULTS

The screenshot displays the IBM Watsonx Agent Lab interface. The top navigation bar includes the IBM Watsonx logo, an 'Upgrade' button, a user profile for 'Karthika Bondalapati's Ac...', location 'Sydney', and a 'KB' icon. The main header shows the project path 'Projects / InterviewTrainerAgent / Agent Lab' and buttons for 'Share feedback', 'Unsaved', 'New agent', and 'Deploy'.

The 'Build' section on the left contains the following components:

- Model:** mistral-large
- Framework:** LangGraph
- Architecture:** ReAct
- Instructions:** You are a helpful assistant that uses tools to answer questions in detail. (with a link to 'Advanced configuration')
- Knowledge:** A vector index containing 'Trainer agent for interview'. A 'Clear chat' link is present.
- Tools:** (empty section)

The 'Agent preview' section on the right shows a chat history:

- User:** You: 05:58 PM. Question: 'What should I include in my self-introduction for an interview?'
- Agent:** watsonx Agent 05:58 PM. Response: **What to Include in Your Self-Introduction for an Interview**. A well-crafted self-introduction can set the tone for the rest of your interview. Here are some key elements to include:
 - 1. Greeting and Introduction**
 - Start with a polite greeting and introduce yourself by name.
 - Example: "Good morning/afternoon, I'm [Your Name]."
 - 2. Educational Background**
 - Mention your highest degree and the institution you attended.
 - Example: "I recently graduated with a Bachelor's degree in Computer Science from [University Name]."
 - 3. Professional Experience**

At the bottom of the chat is a text input field with the placeholder 'Type something...' and a send button.

RESULTS

Deployed AI Agent

The screenshot displays the IBM watsonx Agent web interface. The browser address bar shows the URL: `au-syd.dai.cloud.ibm.com/ml-runtime/deployments/f11f3754-f225-4500-ae65-164da11aa05a/chat?space_id=4ea0dfa4-eb9e-476a-abe5-b8c06a5a43...`. The page title is "watsonx Agent" with a green "Deployed" status and an "Online" indicator. Below the title, there are tabs for "API reference", "Test", and "Preview", with "Preview" being the active tab. A "New chat +" button is visible on the right. The chat history shows a user asking for interview questions for an HR-manager, and the watsonx Agent responding with a list of technical questions. The right sidebar, titled "About this deployment", provides details about the deployment, including the name "watsonx Agent", a description, deployment ID, serving name, software specification (runtime-24.1-py3.11), hardware specification (Extra extra small: 1 CPU and 2 GB RAM), and tags.

Deployment spaces / InterviewAgent / watsonx Agent /

watsonx Agent Deployed Online

API reference Test **Preview**

New chat +

You 06:47 PM
give me the interview questions for HR-manager

watsonx Agent 06:47 PM
Hi, I am watsonx.ai agent. How can I help you?
Here are some interview questions for an HR Manager:
HR Manager Interview Questions
Technical Questions
1. What are the key responsibilities of an HR Manager?
2. How do you handle employee relations issues?
3. Please offer your suggestions with recruitment and retention of employees.

Type something...

About this deployment

Name
watsonx Agent

Description
Change this description to reflect your particular agent

Deployment Details
Deployment ID: f11f3754-f225-45...
Serving name:
No serving name.
Software specification:
runtime-24.1-py3.11
Hardware specification:
Extra extra small: 1 CPU and 2 GB RAM
Copies:
1

Tags
wa-agent

Associated asset
watsonx Agent
6b37a98c-588b-4a5c-b75d-4d8cc241d47a

CONCLUSION

- The Interview Trainer Agent uses IBM Watsonx.ai and RAG to help users prepare for interviews by answering HR, technical, and resume-related queries. It offers smart, real-time support through a vector-based knowledge system deployed on IBM Cloud.

FUTURE SCOPE

- Add voice-based interaction for a more natural experience
- Provide personalized feedback based on user responses
- Integrate real-time job market trends and data
- Support multiple languages for wider accessibility
- Include mock interview simulations using advanced AI
- Track user progress and suggest improvement areas
- Enable integration with resume-building and job portals

IBM CERTIFICATIONS

In recognition of the commitment to achieve
professional excellence



kaarthika bondalapati

Has successfully satisfied the requirements for:

Getting Started with Artificial Intelligence



Issued on: Jul 15, 2025
Issued by: IBM SkillsBuild

Verify: <https://www.credly.com/badges/f91381af-9016-4990-af76-107bd968d518>



7/24/25, 8:02 PM

Completion Certificate | SkillsBuild

IBM **SkillsBuild**

Completion Certificate



This certificate is presented to
kaarthika bondalapati

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

GITHUB LINK

GitHub Repository Link :

https://github.com/Kaarthika-0927/Interview_Trainer_Agent/tree/main



THANK YOU