IBM AICTE PROJECT

AI CAREER COUNSELOR RURAL YOUTH

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OUTLINE

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PROBLEM STATEMENT

In rural areas of India and other developing regions, many students and young adults struggle to make informed career choices due to limited access to professional guidance, poor digital literacy, and a lack of awareness about diverse career opportunities, skill development programs, and government initiatives.

Problem:

Rural youth face **barriers in accessing career counseling** services, leading to misinformed decisions, unemployment, or underemployment. Existing career guidance resources are either not tailored to their needs or are inaccessible due to language, location, or technology barriers.



TECHNOLOGY USED

IBM cloud lite services

IBM Watson Assistant

IBM Cloud

Language Translator

IBM Granite model

Testing Tools



ALGORITHM

1. Natural Language Processing (NLP):

- Used by IBM Watson Assistant to understand and respond to user queries
- Processes user inputs in regional languages (via Language Translator)
- Extracts **intents** (e.g., "I want a job") and **entities** (e.g., "B.Tech", "Skill India")

2. Rule-Based Dialog Management:

- Predefined dialog flows guide the user through structured conversations
- Helps users choose education level, interests, and get career suggestions

3. Decision Tree Logic (used inside the dialog):

- Based on user responses, follows a branching logic to recommend paths
- Example:
 - If 10th passed → Suggest diploma + vocational courses
 - If Graduate → Suggest job portals, competitive exams



IBM CLOUD SERVICES USED

- Watson Assistant
- Watson Language Translator
- IBM Cloud Functions
- IIBM Cloudant
- IBM Object Storage
- IBM Cloud Monitoring



WOW FACTORS

1. Multilingual Support

- Supports regional languages like Telugu, Hindi, etc.
- Makes career guidance accessible to rural youth who are not fluent in English

2. 24/7 Availability

- Provides instant career guidance anytime, anywhere
- No need for physical appointments or internet-savvy users

3. Personalized Recommendations

- Suggests careers, courses, and training based on user inputs (education, interests, skills)
- Feels like talking to a real counselor

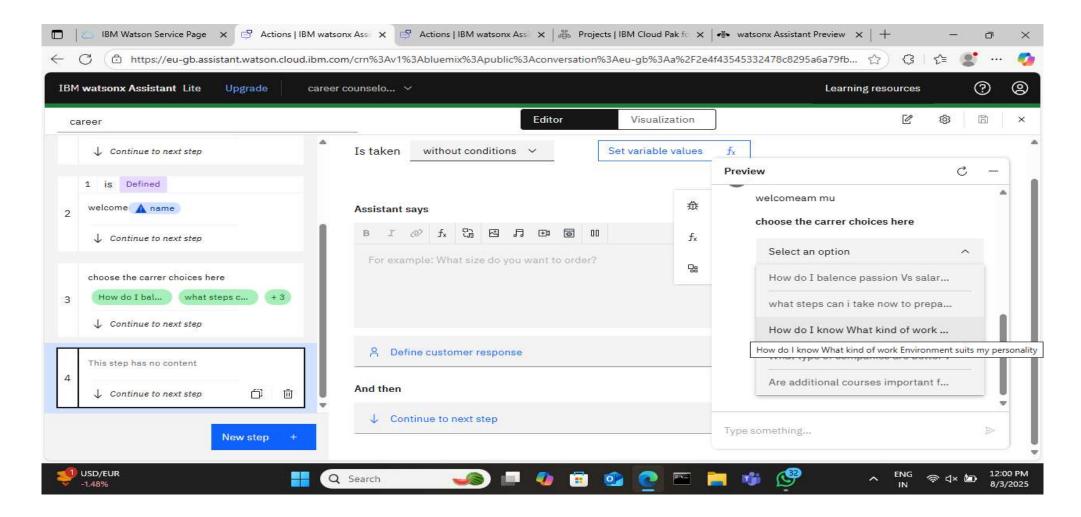


END USERS

- Rural Students (Class 10th, 12th, and Graduates) Research Institutions and Universities
- Parents and Guardians
- Unemployed/Underemployed Youth
- School Teachers and Village Educators

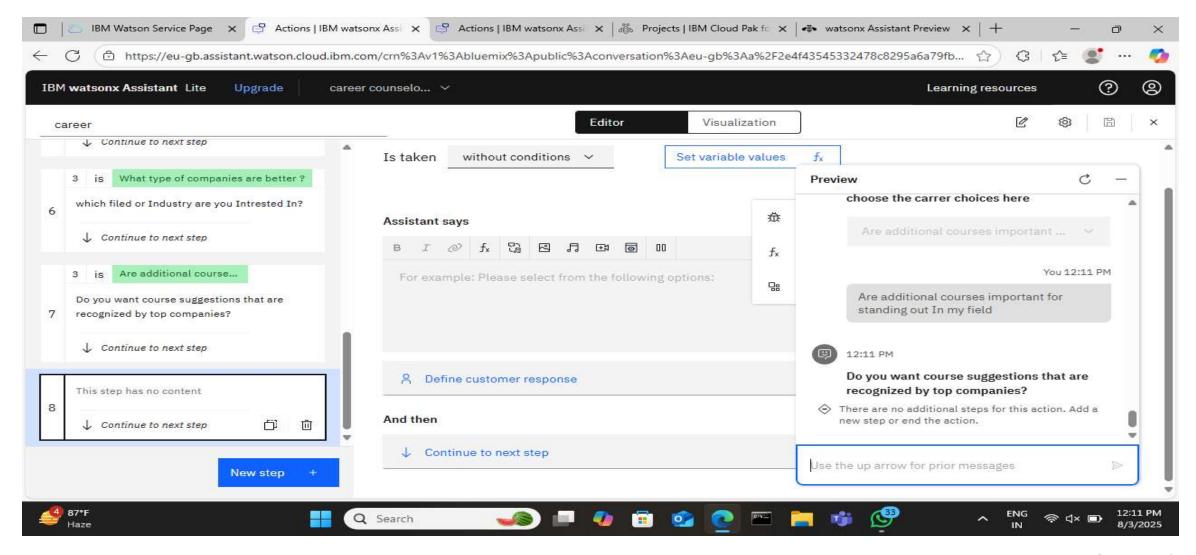


OUTPUT-1



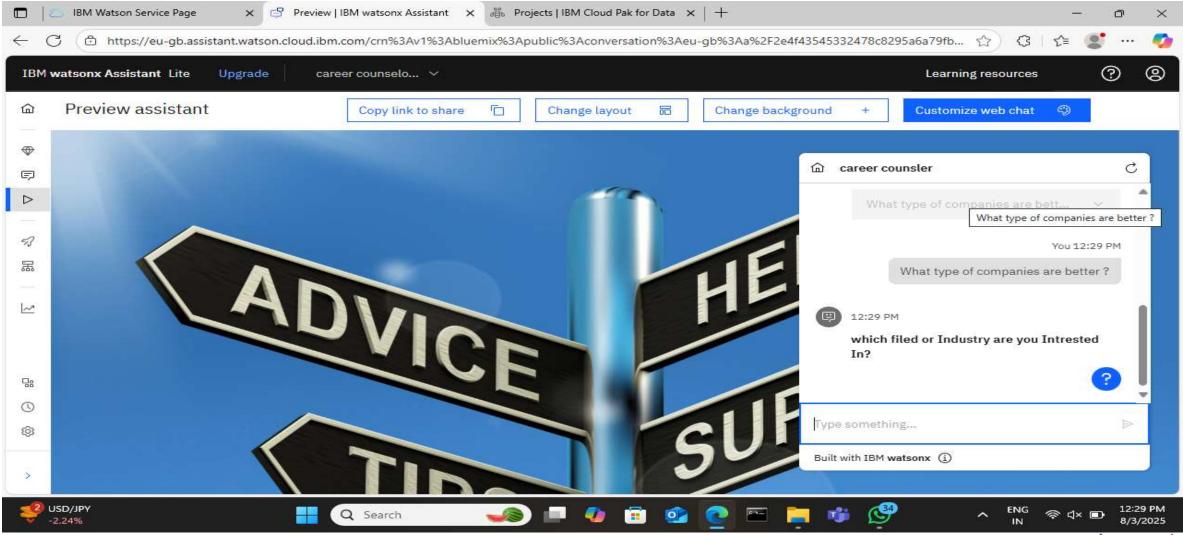


OUTPUT-2





OUTPUT-3





CONCLUSION

The **AI-based Career Counselor** for rural youth is a powerful initiative that bridges the gap between **opportunity and awareness**. By leveraging **IBM Cloud services** like Watson Assistant and Language Translator, the project offers **accessible**, **multilingual**, **and personalized career guidance** to students and job seekers in remote areas.

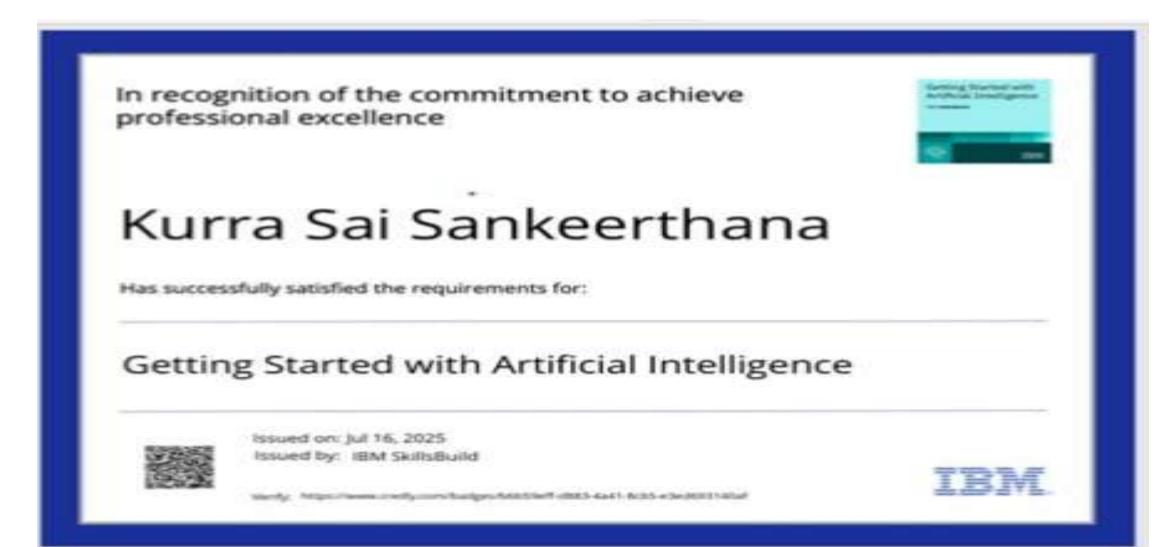


FUTURE SCOPE

- Voice-Based Interaction
- Mobile App Integration
- AI-Based Career Prediction
- Integration with Government Portals
- Real-Time Counsellor Support



IBM CERTIFICATES:





IBM SkillsBuild

Completion Certificate



This certificate is presented to

KURA Sai Sankeerthana

for the completion of

Lab: Retrieval Augmented Generation with LangChain

(ALM-COURSE_3824998)

According to the Adobe Learning Manager system of record



https://GitHub.com/Kurasaisankeerthana/Career_Counselor



GITHUB LINK

https://GitHub.com/Kurasaisankeerthana



THANK YOU

