### IBM SKILL BUILD PROJECT

# **HEALTH ASSISTANCE AGENT**

#### **Presented By:**

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### **OUTLINE**

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



# PROBLEM STATEMENT

#### Problem Statement :

Users often struggle to understand their health conditions due to vague symptoms, misinformation, and language barriers. There is a need for a reliable Al-based solution that offers symptom analysis, accurate guidance, and referrals while avoiding self-diagnosis, especially in regions with limited access to healthcare professionals or verified medical information.

#### Proposed Solution :

Develop an Agentic Al Health Symptom Checker that analyzes user-input symptoms in natural language, retrieves verified medical data from trusted sources, and provides probable conditions, urgency levels, preventive care, and referral advice. It supports multiple languages, promotes early detection, and empowers users with accurate, educational health recommendations.



# 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
- IBM Cloud Watsonx Al runtime
- IBM Cloud Agent Lab
- IBM Granite foundation model



### **WOW FACTORS**

Supports natural language input, multi-language interaction, and urgency-based recommendations. Retrieves verified data from WHO and trusted portals. Promotes safe, educational guidance over self-diagnosis, enhancing early detection and informed health actions—especially in remote or underserved regions.

### Unique Features :

Enables personalized symptom analysis with age and region context, voice input/output for accessibility, and integration with telehealth or nearby clinics. Offers daily wellness tips, outbreak alerts, and ensures data privacy through encrypted, on-device processing—making it both user-centric and medically reliable.



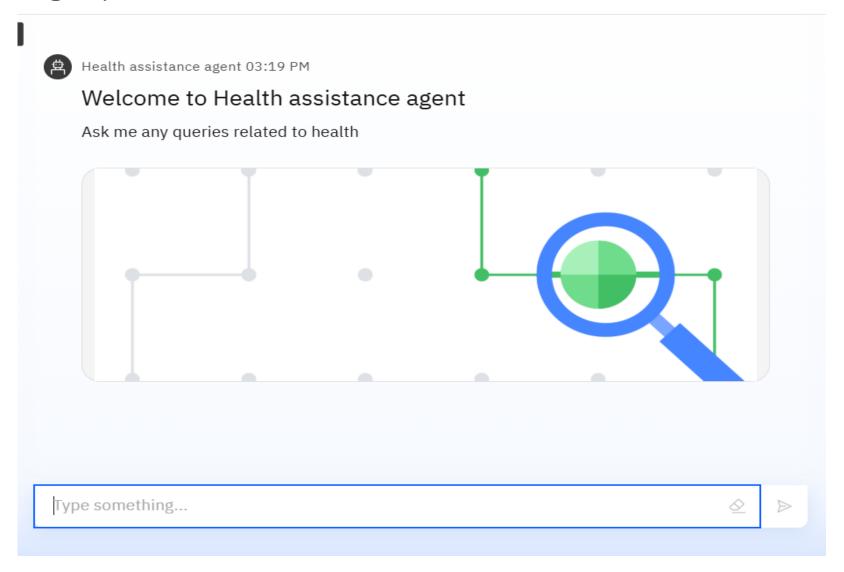
#### **END USERS**

- •General Public Individuals seeking quick, reliable health insights without visiting a doctor.
- •Rural & Underserved Communities People with limited access to healthcare professionals or clinics.
- •Elderly & Visually Impaired Users needing voice-based, accessible health assistance.
- •Parents & Caregivers Concerned about children's symptoms or elderly care.
- •Multilingual Populations Users who prefer interacting in regional or native languages.
- •Travelers & Migrants People needing quick health info in unfamiliar locations or languages.
- •Public Health Agencies For disseminating verified, educational health advice at scale.



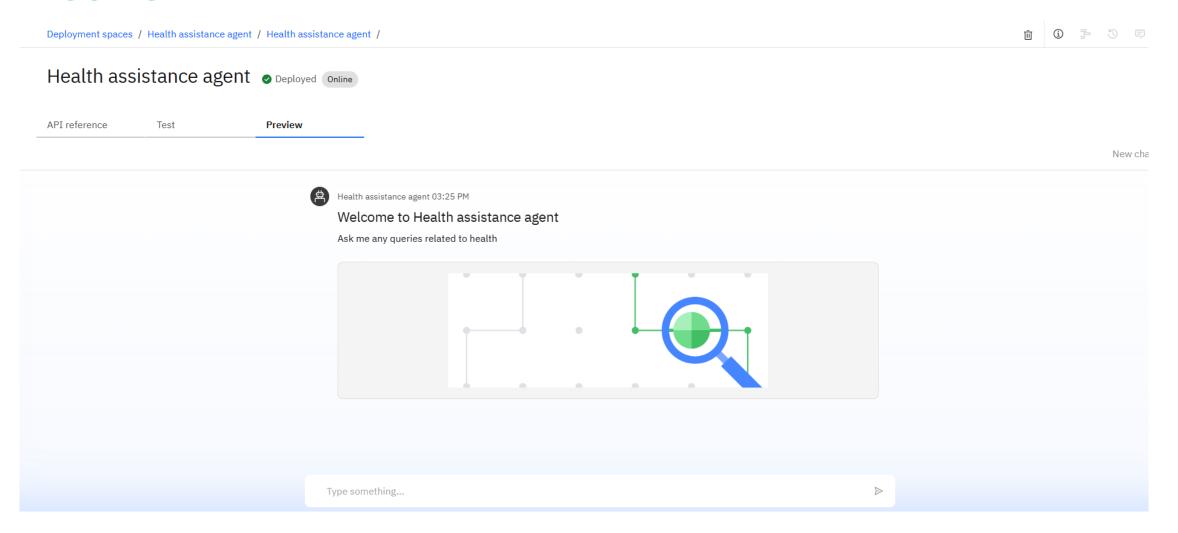
### **RESULTS**

#### Agent preview



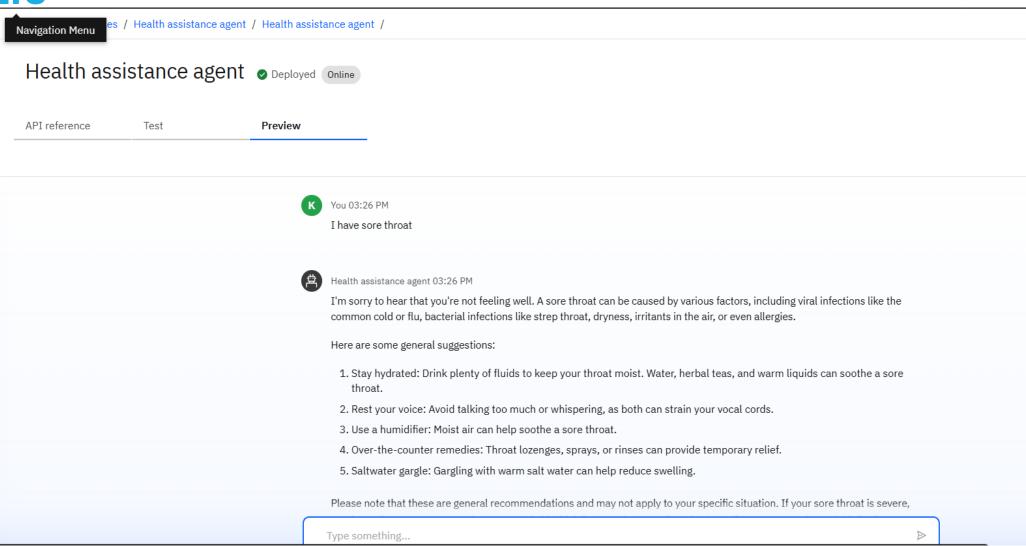


### **RESULTS**





### **RESULTS**





#### CONCLUSION

The Agentic AI Health Symptom Checker is a transformative tool that empowers individuals with accessible, accurate, and multilingual health guidance. By combining trusted medical data, intelligent symptom analysis, and personalized recommendations, it bridges the gap between awareness and action—promoting early detection, reducing misinformation, and supporting healthier communities worldwide.



### **GITHUB LINK**

LINK: <a href="https://github.com/chandrakanth1-1/Health-assistance-agent">https://github.com/chandrakanth1-1/Health-assistance-agent</a>



## **FUTURE SCOPE**

- Wearable Integration
- Al-Powered Health Monitoring
- Mental Health Support
- EMR Integration
- Disease Outbreak Detection



### **IBM CERTIFICATIONS**

In recognition of the commitment to achieve professional excellence



# Karre Chandrakanth

Has successfully satisfied the requirements for:

Getting Started with Artificial Intelligence



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#### Attach your RAG LAB certificate here

#### IBM SkillsBuild

#### Completion Certificate



This certificate is presented to

Karre Chandrakanth

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



## **THANK YOU**

