# CAPSTONE PROJECT AGENTIC AI HEALTH SYMPTOM CHECKER

Presented By:

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**Git Hub:** 

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## **OUTLINE**

- Problem Statement
- Proposed System/Solution
- System Development Approach
- Result (Output Image)
- Conclusion
- Future Scope
- References



#### PROBLEM STATEMENT

**Example:** An Agentic AI Health Symptom Checker helps users understand their health conditions by analyzing symptoms and providing probable causes, preventive advice, and care recommendations. It retrieves verified medical data, symptom databases, and guidelines from trusted sources like WHO, government health portals, and medical journals.



## PROPOSED SOLUTION

The proposed system aims to address the challenge of helping users understand their health conditions by analyzing symptoms and providing reliable guidance. This involves leveraging IBM Cloud technologies, large language models (LLMs), and verified medical datasets to offer accurate, multi-language, and agentic interactions.

#### **Data Collection:**

- Source from WHO, CDC, Govt. portals.
- Collect symptom, disease, medicine, and doctor info.

#### **Data Preprocessing:**

- Clean and standardize data.
- Map symptoms to possible causes, remedies, and urgency.
- Add language support for Indian languages via Watson Language Translator.

#### Al Model:

- Use IBM Granite LLM via Watsonx.ai for interpretation.
- Use Watson Orchestrate for agent-like conversation flow.

#### **Deployment:**

\_Store data logs (non-sensitive) in IBM Cloud Object Storage.

**Evaluation:** Suggests likely conditions, urgency, remedies, medicines, and specialist. Promotes early care, reduces misinformation. Multi-language, accessible, safe tool for users.

Result: Promotes early care, reduces misinformation.



#### SYSTEM APPROACH

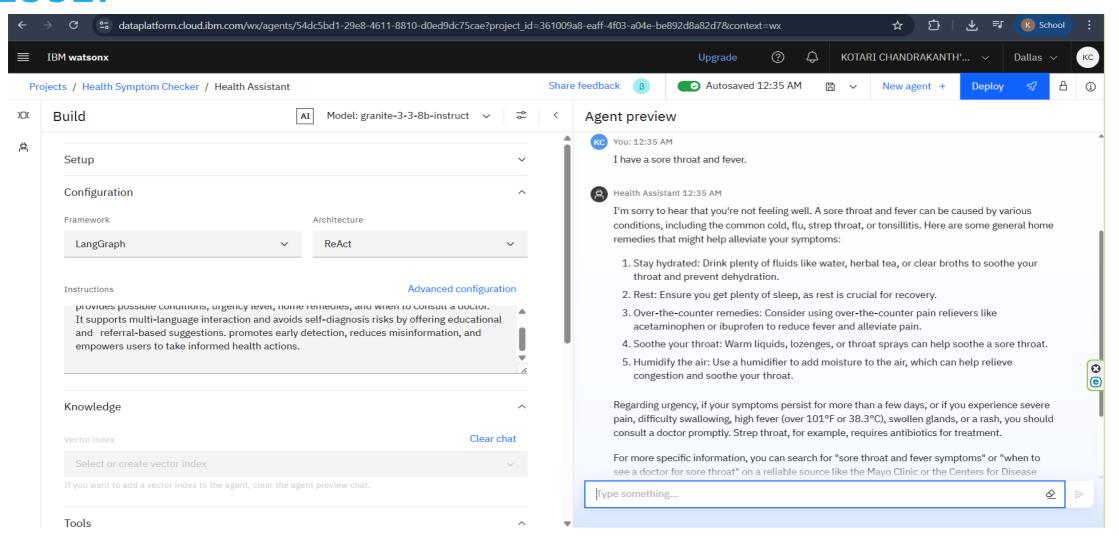
The "System Approach" section outlines the overall strategy and methodology for developing and implementing the Health Symptoms Checker.

#### **System Requirements:**

- Hardware Requirements: Minimum 8 GB RAM (for development/testing), Dual-core CPU or higher, stable internet connection.
- Software Requirements: os: Windows / linux, Web Browsers (Chrome, Bing).
- IBM Cloud Services:Watsonx.ai (Granite LLM), Watson Orchestrate (for conversation flow).
- APIs & Libraries: IBM Cloud credentials and API key.

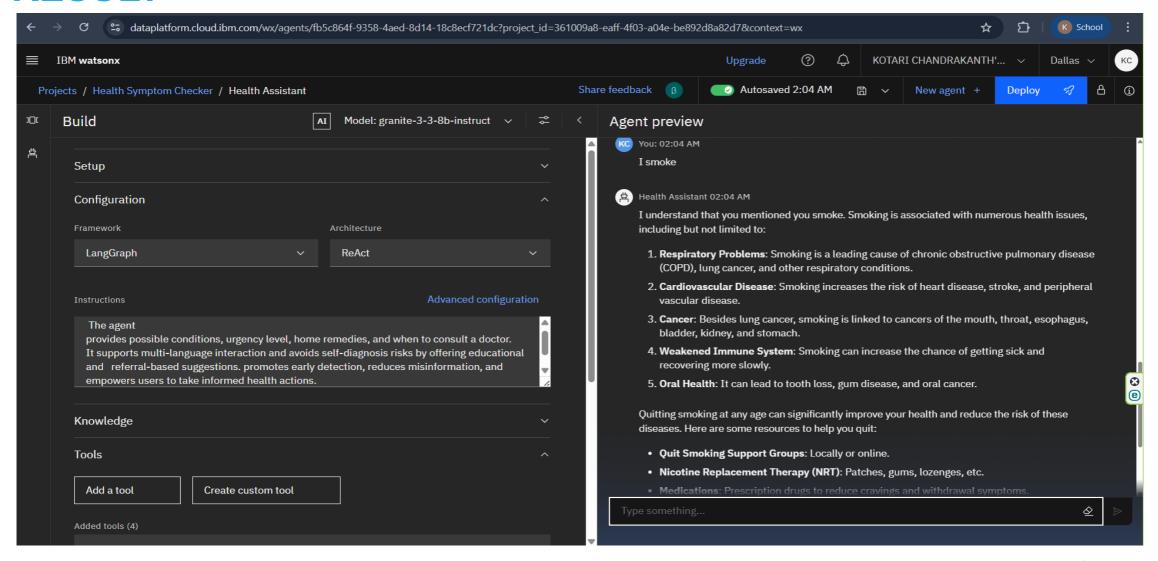


#### **RESULT**





## **RESULT**





## CONCLUSION

• The Agentic AI Health Symptom Checker offers a reliable, intelligent, and user-friendly solution for preliminary health assessment. By leveraging IBM's Granite LLM, Watsonx, and trusted medical data sources, the system ensures safe, educational, and multilingual health guidance. It empowers users with early insights, avoids self-diagnosis risks, and promotes timely medical consultation — ultimately enhancing public health awareness and digital healthcare accessibility.



#### **FUTURE SCOPE**

The Agentic AI Health Symptom Checker can evolve by integrating with wearable health devices for real-time tracking, enabling voice-based interactions for better accessibility, and syncing with electronic health records for personalized advice. It can also offer localized health alerts, doctor appointment booking, and deployment as a mobile app, making healthcare guidance more accessible, intelligent, and proactive in the future.



#### REFERENCES

The development of the Agentic AI Health Symptom Checker is supported by trusted medical and technological resources. Medical data and guidelines are derived from reputable sources such as the World Health Organization (WHO), the Centers for Disease Control and Prevention (CDC), and the National Health Portal of India. Additional clinical insights are drawn from peer-reviewed research available on PubMed. The technical foundation is built using IBM Cloud services, including Watsonx and Granite LLM, with guidance from official IBM documentation.



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According to the Adobe Learning Manager system of record

Completion date: 24 Jul 2025 (GMT)

Learning hours: 20 mins



# **THANK YOU**

