
IBM HACKATHON PROJECT

AGENTIC AI HEALTH SYMPTOM CHECKER

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OUTLINE

- Problem Statement
- Technology used
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- IBM Certifications

PROBLEM STATEMENT

Millions face difficulty understanding their health conditions early due to limited access to accurate, real-time, and understandable medical information.

Manual self-diagnosis often leads to misinformation and delays in care.

Proposed Solution:

An **Agentic AI Health Symptom Checker** that uses natural language understanding and verified medical data to:

- Analyze symptoms
- Suggest possible causes
- Provide home remedies and care tips
- Advise when to consult a doctor

TECHNOLOGY USED

- IBM Cloud Lite Services
- IBM Granite Foundation Model
- Natural Language Processing (NLP)
- Retrieval Augmented Generation (RAG)
- Multilingual AI Chat Interface

IBM CLOUD SERVICES USED

- IBM Watsonx AI Studio
- IBM Watsonx AI Runtime
- IBM Cloud Agent Lab
- Granite Models for medical reasoning

WOW FACTORS

- Natural language input: “I have chest pain and a mild fever”
- Medical-grade, trustworthy output using WHO, CDC, and journal data
- Multilingual symptom understanding
- Preventive care tips and urgency rating
- Referral to telemedicine or emergency care as needed
- Avoids risky self-diagnosis while educating users

END USERS

- General Public
- Remote & Rural Health Seekers
- Primary Health Workers
- NGOs & Health Volunteers
- Students & Elderly Populations

RESULTS

[Upgrade](#) [?](#) [🔔](#) Ashish Kumar Pandey's Ac... [Dallas](#) [AK](#)


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Agent preview

😊 AI Health Symptom Checker - Nonu 03:03 PM

Welcome to AI Health Symptom Checker - Nonu

I'm Nonu- Helps to check health conditions, analyzing symptoms, and provides recommendations.



[🔍](#) [🗨️](#) [📄](#) [▶️](#)

RESULTS

[Upgrade](#)?🔔

Ashish Kumar Pandey's Ac...▼

Dallas▼

AK

[Share feedback](#)β

Unsaved📁▼

New agent+

Deploy🚀

Agent preview

AK

You: 02:48 PM

I have a sore throat and fever

😊

AI Health Symptom Checker - Nonu 02:48 PM

Possible Conditions:

1. Strep Throat
2. Viral Infection (like the common cold or flu)
3. Tonsillitis

Urgency Level:

Medium - While these symptoms can often be managed at home, a strep throat or other bacterial infection needs antibiotics, and a fever can sometimes indicate a more serious condition.

💡🔄📎➤

RESULTS

Agent preview



You: 03:06 PM

"I have a sore throat and fever



AI Health Symptom Checker - Nonu 03:06 PM

Possible Conditions:

1. Strep Throat
2. Viral Infection (like the common cold or flu)
3. Tonsillitis

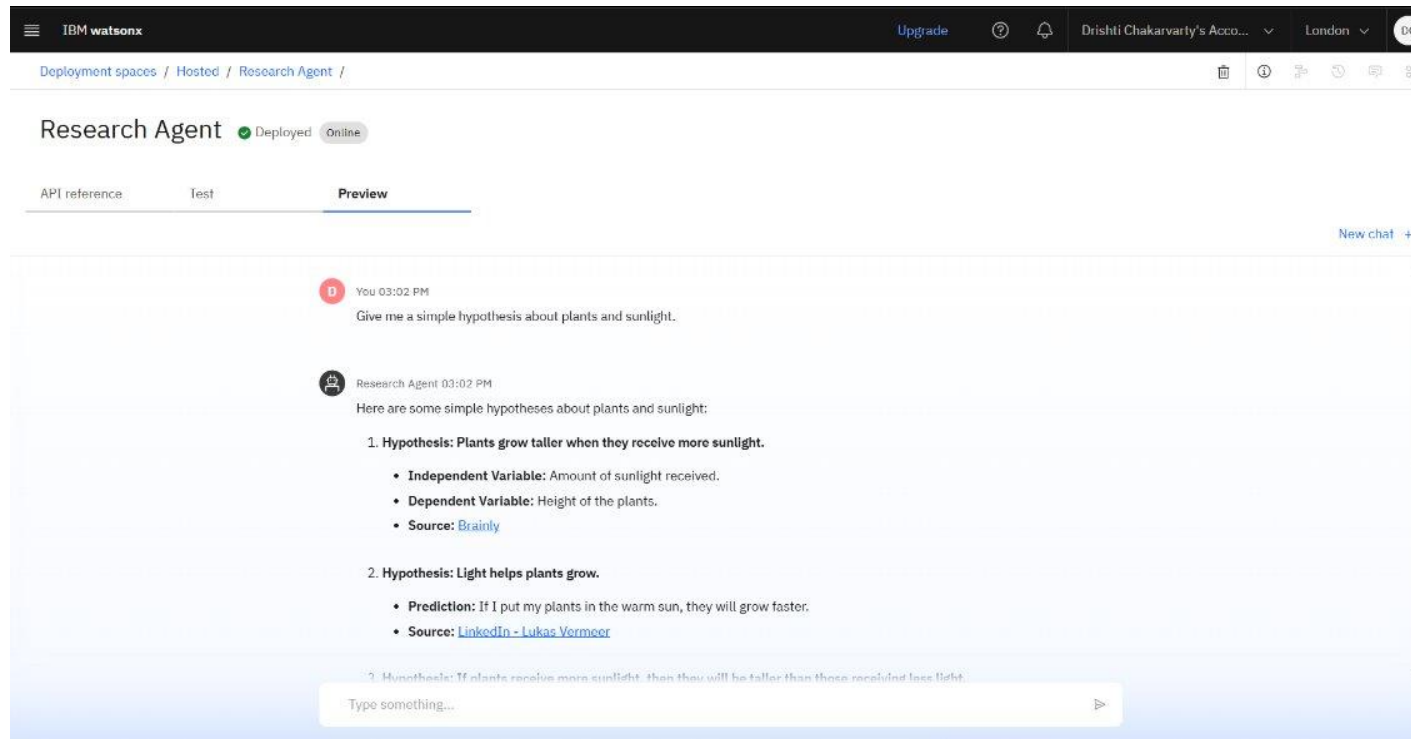
Urgency Level: Medium - While these symptoms can be associated with less serious conditions like a viral infection, they can also indicate a more serious condition such as strep throat.

Home Remedies or Preventive Advice:

- Stay hydrated by drinking plenty of fluids. Warm liquids like soup or herbal tea can soothe a sore throat.
- Use throat lozenges or hard candies to help soothe the throat.

RESULTS

Deployed AI Agent



The screenshot displays the IBM Watsonx user interface. At the top, a dark navigation bar includes the 'IBM watsonx' logo, an 'Upgrade' button, and user account information for 'Drishti Chakarvarty's Acco...'. Below this, a breadcrumb trail shows 'Deployment spaces / Hosted / Research Agent'. The main content area features the 'Research Agent' name with 'Deployed' and 'Online' status indicators. Three tabs are visible: 'API reference', 'Test', and 'Preview', with the 'Preview' tab selected. The chat window shows a conversation where the user asks for a hypothesis about plants and sunlight, and the agent responds with two hypotheses, each including variables and a source. A third hypothesis is partially visible at the bottom.

IBM watsonx Upgrade ? ⓘ Drishti Chakarvarty's Acco... London DC

Deployment spaces / Hosted / Research Agent

Research Agent Deployed Online

API reference Test **Preview**

New chat +

You 03:02 PM
Give me a simple hypothesis about plants and sunlight.

Research Agent 03:02 PM
Here are some simple hypotheses about plants and sunlight:

- Hypothesis: Plants grow taller when they receive more sunlight.**
 - **Independent Variable:** Amount of sunlight received.
 - **Dependent Variable:** Height of the plants.
 - **Source:** [Brainly](#)
- Hypothesis: Light helps plants grow.**
 - **Prediction:** If I put my plants in the warm sun, they will grow faster.
 - **Source:** [LinkedIn - Lukas Vermeer](#)
- Hypothesis: If plants receive more sunlight, then they will be taller than those receiving less light.**

Type something...

CONCLUSION

The AI Health Symptom Checker helps users:

- Understand symptoms safely
- Take informed actions
- Access verified, multilingual, and easy-to-understand guidance
- Promotes early detection and reduces misinformation

GITHUB LINK

- **GitHub Link :** <https://github.com/Ashishkr-pandey/-Agentic-AI-Health-Symptom-Checker->

FUTURE SCOPE

- Voice-activated health assistant
- Integration with wearables (heart rate, temperature)
- Personalized health records sync
- Telemedicine integration
- Offline Mode for rural deployment
- Chronic illness tracker

IBM CERTIFICATIONS

In recognition of the commitment to achieve professional excellence



Ashish Pandey

Has successfully satisfied the requirements for:

Journey to Cloud: Envisioning Your Solution



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Issued by: IBM SkillsBuild

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7/26/25, 5:11 PM

Completion Certificate | SkillsBuild

IBM SkillsBuild

Completion Certificate



This certificate is presented to
Ashish Kumar Pandey

for the completion of

**Lab: Retrieval Augmented Generation with
LangChain**

(ALM-COURSE_3824998)

According to the Adobe Learning Manager system of record

Completion date: 26 Jul 2025 (GMT)

Learning hours: 20 mins



THANK YOU