
IBM AICTE PROJECT

HEALTH SYMPTOM CHECKER AGENT

Presented By:

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OUTLINE

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PROBLEM STATEMENT

In today's digital world, people often turn to the internet to understand their health symptoms—but the information is scattered, unreliable, and sometimes even dangerous. Many don't know whether to worry, seek medical help, or just rest.

Proposed Solution:

An intelligent **AI Health Symptom Checker Agent** powered by **Natural Language Processing (NLP)** and **Retrieval-Augmented Generation (RAG)**, designed to interpret user-described symptoms in natural language, provide likely causes, suggest preventive care, and recommend reliable medical resources. It accesses verified data from trusted sources like **WHO**, **government portals**, and **peer-reviewed journals**, enabling users to make informed health decisions quickly.

TECHNOLOGY USED

IBM cloud lite services: IBM Cloud Lite offers free, entry-level access to IBM's powerful cloud infrastructure, enabling developers to build, deploy, and test applications with essential AI, data, and compute services.

Natural Language Processing (NLP): Natural Language Processing (NLP) enables the AI agent to understand and interpret human language inputs like "I have a headache and sore throat," making interaction natural and user-friendly.

Retrieval Augmented Generation (RAG): Retrieval-Augmented Generation (RAG) combines AI's ability to generate text with real-time retrieval from trusted sources, allowing the agent to provide accurate, up-to-date health information instead of relying solely on pre-trained data.

IBM Granite model: IBM Granite is a powerful foundation AI model designed for enterprise use, enabling advanced natural language understanding, reasoning, and safe response generation in health and other critical domains.

IBM CLOUD SERVICES USED

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

WOW FACTORS

This agent will significantly reduce research time, improve the quality of literature reviews, help This AI agent helps users take early action, avoid misinformation, and understand symptoms in a safe and reliable way. It reduces unnecessary doctor visits, eases health anxiety, and promotes informed self-care through smart, personalized interaction.

Unique Features:

- Natural language input for symptom description (e.g., “I feel tired and have a sore throat”)
- Talk to it like a human: Just type “I feel dizzy and have a headache” — it understands you instantly!
- Multi-language support for wider accessibility
- Trusted medical data from WHO, government portals, and journals
- Smart suggestions: possible conditions, urgency level, and when to consult a doctor
- Preventive tips and safe home remedies

END USERS

- **General Public** – Individuals seeking quick, reliable guidance on common health symptoms.
- **Users** – Those needing easy, language-friendly tools for self-assessment and care self-assessment and care.
- **Rural & Non-English Speakers** – Users who benefit from multi-language support and simplified interaction.
- **Caregivers & Parents** – People responsible for others' health, looking for early insights before visiting a doctor.
- **Healthcare Helplines & NGOs** – Organizations that can integrate the agent to assist underserved populations.

RESULTS

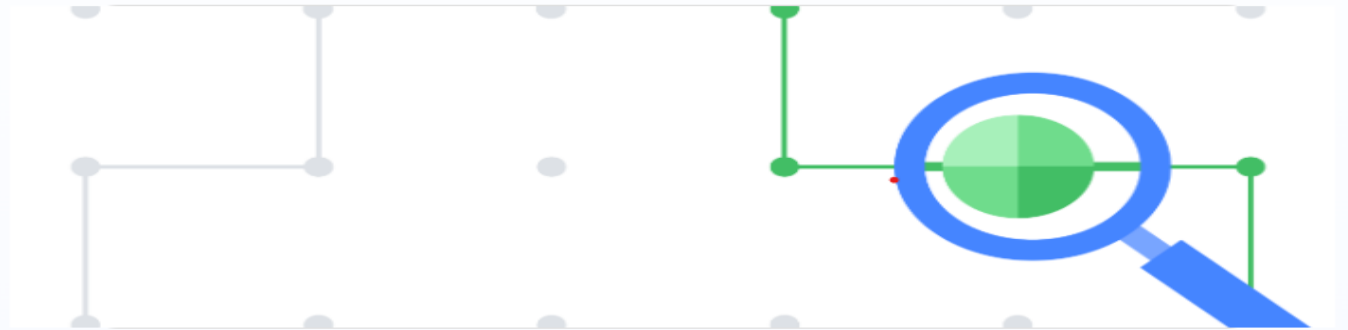
Agent preview



CareBot 05:51 PM

Welcome to CareBot

I'm your health buddy understand symptoms, get trusted advice, and know when to seek care.



Type something...



RESULTS

Agent preview



You: 02:30 PM

मुझे बुखार और खांसी है, मुझे क्या करना चाहिए?



CareBot 02:30 PM

बुखार और खांसी के लिए घरेलू उपचार में शामिल हैं:

- हाइड्रेशन: हाइड्रेटेड रहने और अपने शरीर को विषाक्त पदार्थों से दूर रखने के लिए खूब पानी पिएं।
- इलेक्ट्रोलाइट समाधान: एक चुटकी नमक और चीनी के साथ घर पर बने **रेय** पदार्थ इलेक्ट्रोलाइट की कमी को पूरा करने में मदद कर सकते हैं।
- अदरक: अदरक का पाउडर या चाय बनाकर पीने से खांसी में राहत मिल सकती है।
- शहद: शहद खांसी के लिए एक रामबाण औषधि है और बलगम को कम करने में मदद करता है।
- गरारे: गर्म पानी में आधा चम्मच नमक घोलने से गले की सूजन कम होती है और खांसी से राहत मिलती है।

► How did I get this answer?



Type something...



RESULTS

Agent preview



You: 05:28 PM

Should I go to a doctor for a mild fever?



CareBot 05:28 PM

Possible Health Conditions

A mild fever can be a symptom of various conditions, including:

1. **Common Cold or Flu:** Viral infections that often cause fever, along with other symptoms like cough, sore throat, and body aches.
2. **Gastroenteritis:** A stomach bug that can cause fever, along with symptoms like vomiting, diarrhea, and abdominal pain.
3. **Urinary Tract Infection (UTI):** An infection in the urinary system that can cause fever, along with symptoms like burning sensation during urination and frequent urination.
4. **Heat Exhaustion:** A condition caused by exposure to high temperatures, which can result in fever, along with symptoms like excessive sweating, dizziness, and fatigue.

Urgency Level

- **Low to Moderate:** If your fever is mild (below 102°F or 38.9°C) and you have no other severe symptoms, it can often be managed at home. However, if the fever persists for more than a few days or is accompanied by other concerning symptoms, seek medical attention.

Home Remedies / Self-Care Advice

1. **Rest:** Get plenty of rest to help your body fight the infection.

Type something...



CONCLUSION

- The Health Symptom Checker agent makes healthcare information more accessible, reliable, and easy to understand.
- It helps users interpret their symptoms in simple terms and offers trusted, educational advice—not medical diagnoses.
- By retrieving data from verified sources like WHO and government health portals, it reduces the risk of misinformation.
- The agent supports early self-care and encourages timely consultation with healthcare professionals when needed.
- With multilingual support and personalized responses, it reaches a wider audience and ensures inclusivity.

FUTURE SCOPE

- **Voice-Based Interaction:** Enable voice input for faster and more accessible symptom reporting, especially for elderly or visually impaired users.
- **Wearable Device Connectivity:** Sync with fitness trackers and smartwatches to analyze real-time health data for more accurate responses.
- **Voice & Text Support:** Expand language capabilities with regional voice-based assistance for rural and non-English-speaking users.
- **Emergency Alert System:** Automatically suggest or trigger emergency contact notifications when critical symptoms are detected.

IBM CERTIFICATIONS

Getting Started with AI

In recognition of the commitment to achieve
professional excellence



Archi Patidar

Has successfully satisfied the requirements for:

Getting Started with Artificial Intelligence



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Journey to Cloud: Envisioning Your Solution

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RAG LAB certificate

IBM **SkillsBuild**

Completion Certificate



This certificate is presented to

Archi Patidar

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

Git hub link : <https://github.com/ArchiPatidar/Health-Symptom-Checker-Agent->



THANK YOU