

IBM AICTE PROJECT

AI - HEALTH SYMPTOM CHECKER

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OUTLINE

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

PROBLEM STATEMENT

People often face symptoms like fever or fatigue but lack quick access to reliable health information. Searching online can be confusing or misleading, highlighting the need for a trusted, easy-to-use tool that educates without diagnosing.

Proposed Solution:

Health Symptom Checker is an AI chatbot built on IBM Watsonx.ai (Lite) that analyzes symptoms described in natural language and provides possible causes, urgency levels, self-care tips, and guidance—using trusted sources like CDC and WHO.

TECHNOLOGY USED

IBM cloud lite services

Natural Language Processing (NLP)

Retrieval Augmented Generation (RAG)

Prompt-based AI technology for conversational flows

IBM Granite model

IBM CLOUD SERVICES USED

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

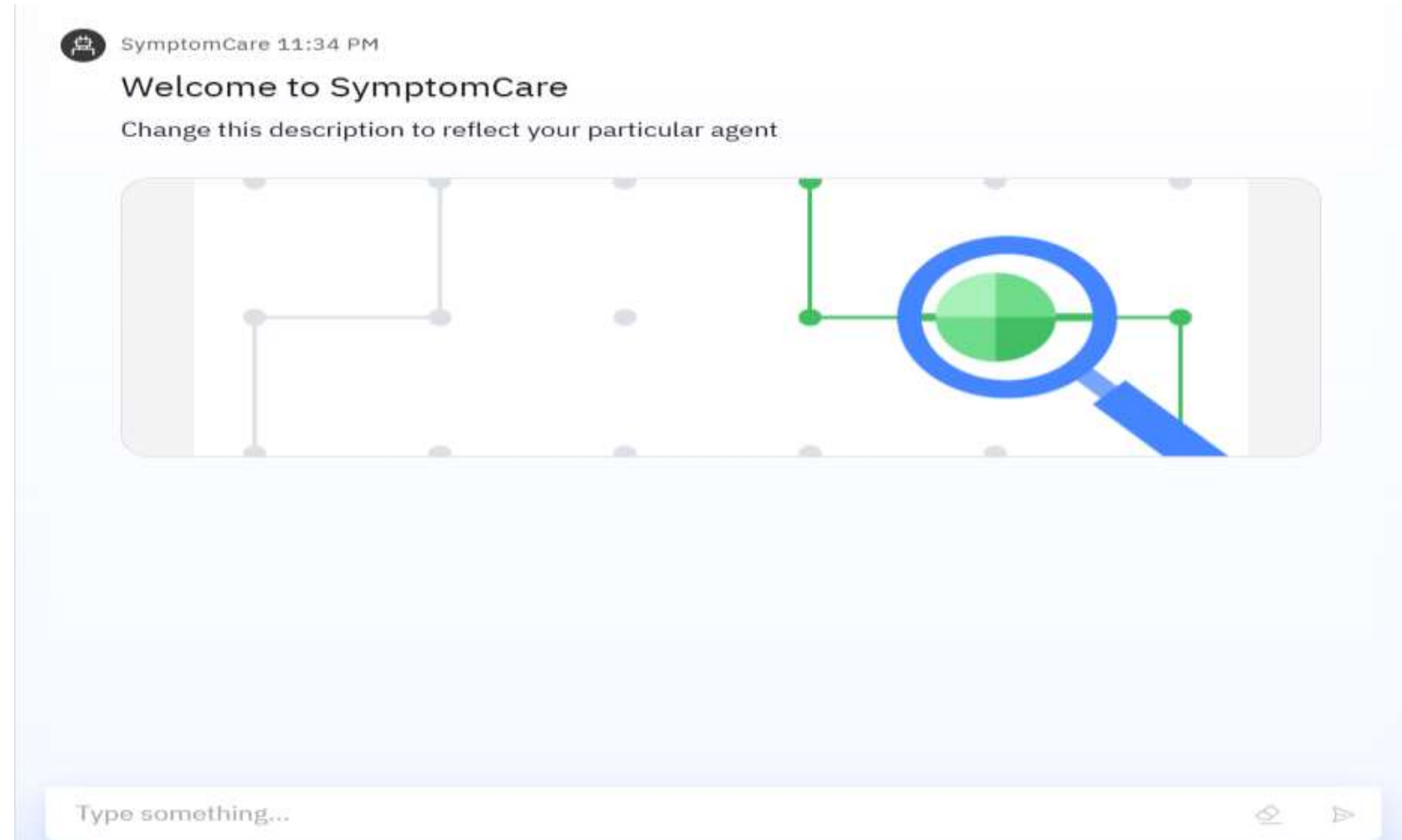
WOW FACTORS

- Fully built and deployed using IBM Cloud Lite with no paid upgrades.
- Simple setup with no complex data pipelines or training required.
- Provides friendly, educational health guidance based on trusted medical sources.
- Prompt-based conversational flow for easy customization and updates.
- Can be integrated as a web chat widget or previewed instantly for user interaction.

END USERS

- Individuals experiencing mild symptoms seeking quick health insights
- Students and working professionals looking for trusted, on-demand symptom guidance
- Health educators or wellness coaches needing a supportive AI assistant
- Anyone wanting reliable, non-diagnostic information for informed health decisions

RESULTS



RESULTS

Agent preview



You: 11:38 PM

i have fever



SymptomCare 11:38 PM

This is not a diagnosis. For medical emergencies or persistent symptoms, consult a healthcare professional.

Here are some possible causes of fever:

1. Infection: Fever can be a symptom of an underlying infection, such as the flu, pneumonia, or a urinary tract infection.
2. Inflammation: Fever can also be caused by inflammation in the body, which can be due to various factors such as injury, infection, or an autoimmune disorder.
3. Medications: Certain medications, such as antibiotics and blood pressure medications, can cause fever as a side effect.
4. Vaccines: Some vaccines, such as the flu vaccine, can cause a low-grade fever as a side effect.

Urgency level: Moderate

Home remedies or self-care advice:

1. Stay hydrated by drinking plenty of fluids, such as water, clear broth, or electrolyte-rich beverages like sports drinks.
2. Rest and avoid strenuous activities.
3. Use a cool compress or take a cool bath to help bring down the fever.

Type something...



RESULTS



You: 01:27 AM

I have sore throat



SymptomCare 01:27 AM

Symptom: Sore Throat

Description: A sore throat is a painful, dry, or scratchy feeling in the throat that can make it uncomfortable to swallow. It is often a symptom of various conditions, ranging from minor to serious.

Possible Causes:

- Viral infections (e.g., common cold, flu)
- Bacterial infections (e.g., strep throat)
- Allergies
- Dry air
- Smoking or exposure to irritants
- Gastroesophageal reflux disease (GERD)
- Tonsillitis

Urgency Level:

- **Low to Moderate:** If the sore throat is mild and not accompanied by other severe symptoms.
- **High:** If the sore throat is severe, persistent, or accompanied by symptoms like fever, swollen lymph nodes, or difficulty swallowing.

Type something...



RESULTS


Deployed AI Agent

Deployment spaces / Health Symptom Checker / SymptomCare /


SymptomCare ● Deployed Online

API reference Test **Preview**

[New chat](#) +

 You 01:20 AM

I am having Chest pain and it has been 2 hours

 SymptomCare 01:30 AM

If you are experiencing chest pain that has lasted for 2 hours, it is important to seek medical attention immediately. Chest pain can be a symptom of a heart attack or other serious conditions, and prompt treatment is crucial.

You can visit your local emergency room or urgent care center, or call emergency services such as 911 in the US.

In the meantime, try to remain calm and still, and avoid driving yourself to the hospital if possible.

It's also a good idea to have someone with you for support and to help provide information to medical personnel.

Remember, it's always better to err on the side of caution when it comes to chest pain, and seeking medical attention promptly can help ensure the best possible outcome.

Please let me know if there's anything else I can help you with.

► How did I get this answer?

CONCLUSION

- The Health Symptom Checker AI agent leverages IBM Cloud Lite's free services to deliver accessible, educational health guidance based on user-described symptoms. This project demonstrates how prompt engineering and IBM Watsonx.ai can be used to build effective, no-cost conversational AI assistants that support informed health decisions—without requiring complex infrastructure or training.

GITHUB LINK

- <https://github.com/annasha234/Health-Symptom-Checker>

FUTURE SCOPE

- Add user profile tracking for personalized health insights
- Enable voice-based interaction using IBM Watson Speech-to-Text and Text-to-Speech
- Integrate with wearable health devices for real-time symptom monitoring
- Expand to multi-language support for broader accessibility
- Enhance responses using advanced RAG-based knowledge retrieval for deeper context and accuracy

IBM CERTIFICATIONS



IBM Certifications





THANK YOU