

HEALTHCARE CHATBOT WITH SYMPTOM ANALYSIS:

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PRESENTATION OUTLINE

- Introduction
- Problem Statement
- Solution
- How It Works
- Model Training
- Key Features
- Benefits
- Conclusion



INTRODUCTION

In today's world, healthcare faces challenges in quick and accurate diagnosis. The healthcare Chatbot uses AI to make symptom analysis easy and effective. With a simple design and advanced backend, it helps users and healthcare providers manage health better and detect conditions early. This chatbot is a step forward in improving healthcare with technology.



PROBLEM STATEMENT



Manual diagnostic processes are time-consuming

Patients struggle to describe symptoms effectively

Delayed diagnosis leads to complications

Need for accessible, fast, and preliminary analysis



SOLUTION

Healthcare chatbot with symptom analysis

Provides a user-friendly interface

Analyzes symptoms

Suggests potential conditions and precautions

ethical & philosophical considerations

Enter your symptoms (comma-separated):

FEVER

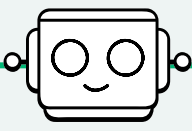
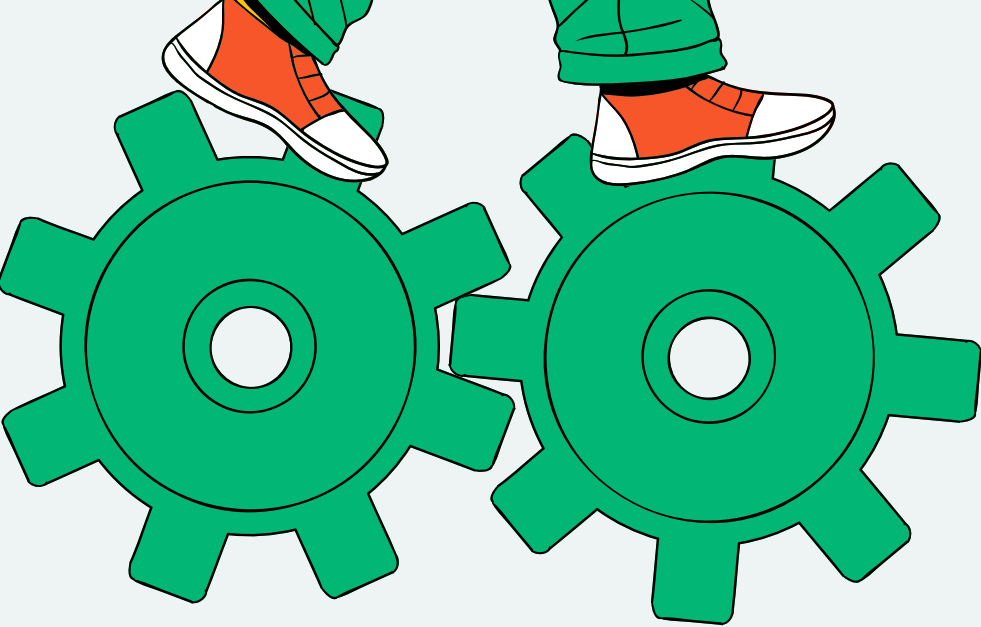
How many days have you been experiencing them?

2

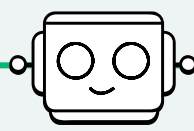
Submit

Predicted Disease: Common Cold
Description: No description available.
Condition Advice: It might not be serious, but take precautions.
Precautions:
1. drink vitamin c rich drinks
2. take vapour
3. avoid cold food
4. keep fever in check

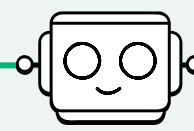
HOW IT WORKS



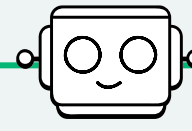
USER INPUTS
SYMPTOMS AND
DURATION



MODEL
PREDICTS
POSSIBLE
CONDITIONS



INTERACTIVE
FOLLOW-UP
QUESTIONS
REFINE
PREDICTIONS



OUTPUTS
DISEASE
PREDICTION,
DESCRIPTION,
AND
PRECAUTIONS



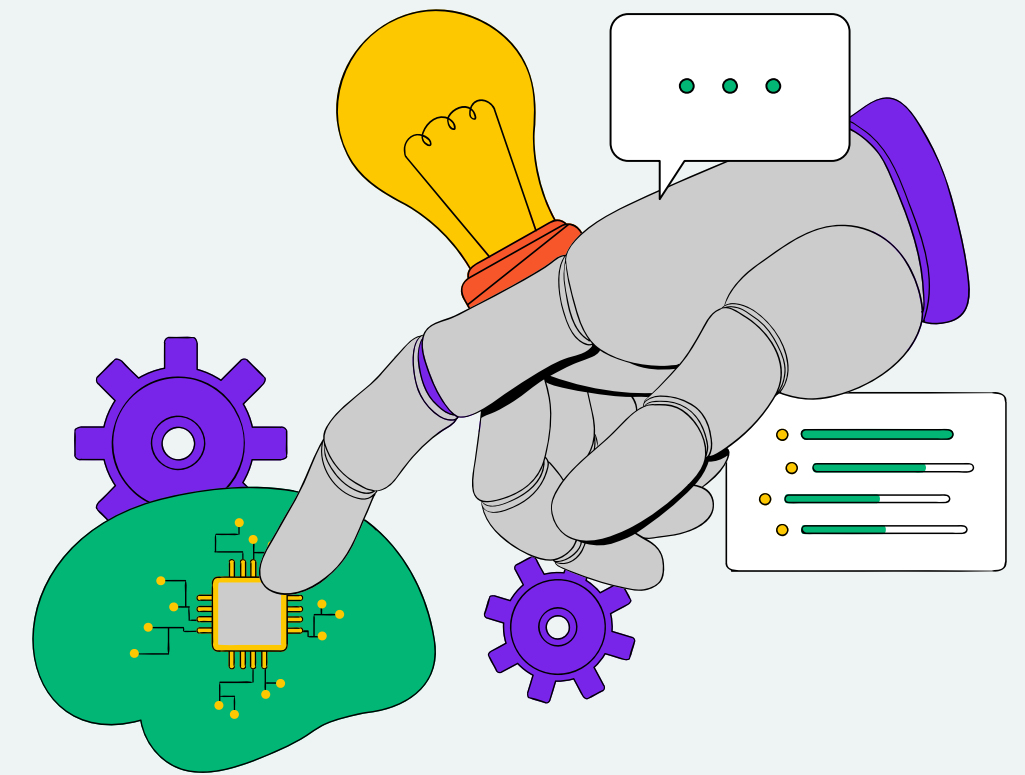
MODEL TRAINING

Data from Dataset: The system uses datasets for symptoms, severities, and precautions.

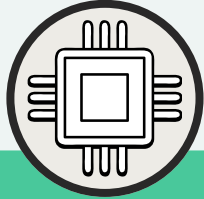
Training/testing split: Data is split into 67% training and 33% testing for validation.

Decision Tree Classifier: Ensures precise and interpretable predictions.

Secondary symptom confirmation: Adds interactivity to improve the decision-making process.

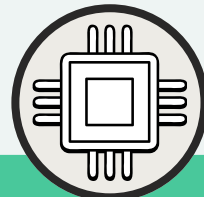


KEY FEATURES



INTERACTIVE AND ADAPTIVE SYMPTOM QUERIES

Dynamically adapts to user responses



OUTPUTS COMPREHENSIVE CONDITION ADVICE

Combines predictions with actionable precautions

Healthcare Chatbot

Enter your symptoms (comma-separated):

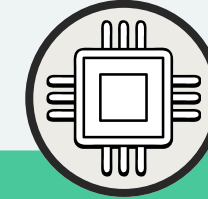
headache

How many days have you been experiencing them?

3

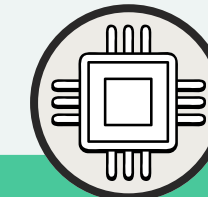
Submit

Predicted Disease: Tuberculosis
Description: No description available.
Condition Advice: It might not be serious, but take precautions.
Precautions:
1. cover mouth
2. consult doctor
3. medication
4. rest



SIMPLE GUI FOR EASY USER INTERACTION

Designed for accessibility by non-technical users



LIGHTWEIGHT AND EFFICIENT FOR DESKTOP USE

Runs seamlessly on local machines

BENEFITS

Advantages of the Chatbot

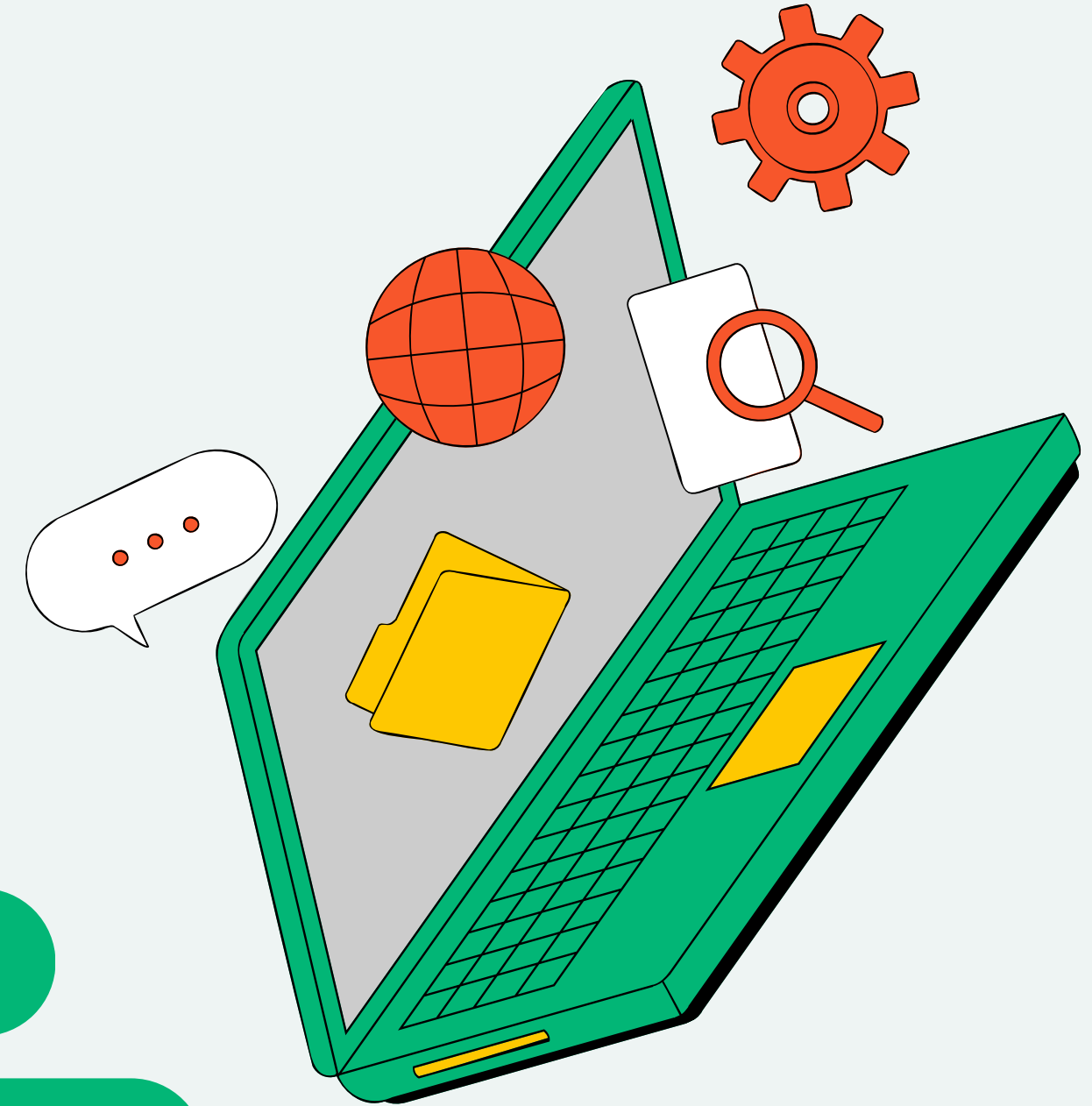
Speeds up initial diagnostic steps

Accessible to non-technical users

Reduces workload on healthcare professionals

Encourages proactive health management

Data Augmentation



CONCLUSION

TRANSFORMING HEALTHCARE



- A step towards AI-driven healthcare: Combines technology and health expertise.
- Facilitates early detection and intervention: Reduces risks through timely predictions.
- Symptom analysis chatbots bridge the gap between patients and professionals: Acts as a reliable intermediary.

