



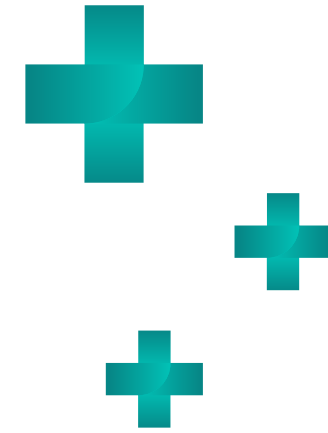
# HEALTH AI

*Intelligent healthcare assistant*

*HealthAI is a healthcare assistant powered by the Granite model from Hugging Face, designed to provide smart and easy-to-understand medical support. Key features include Patient Chat, Disease Prediction, and Treatment Plans, with flexibility to add more functionalities. The system is deployed on Google Colab, ensuring fast, accessible, and secure medical guidance.*

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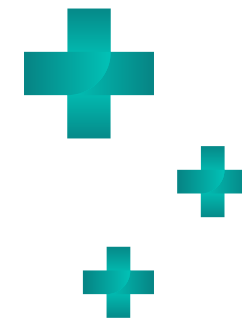


# INTRODUCTION

- HealthAI is an innovative AI-powered healthcare assistant built using the Granite model from Hugging Face. It is designed to make medical guidance more accessible, reliable, and easy to understand for patients. With features such as Patient Chat, Disease Prediction, and Treatment Plans, HealthAI helps users interact naturally with AI to receive meaningful healthcare support. Deployed on Google Colab, the system ensures fast processing, secure interaction, and wide accessibility, making it a practical tool for both learning and real-world healthcare assistance.



- HealthAI is an AI-powered healthcare assistant using the Granite model from Hugging Face. It offers Patient Chat, Disease Prediction, and Treatment Plans, and runs on Google Colab for fast, secure, and accessible medical support.

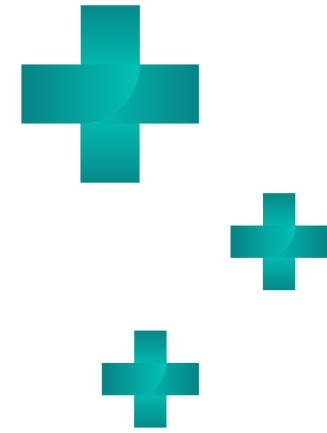




# HEALTHCARE

## OBJECTIVES

- Provide smart medical guidance
- Enhance patient–AI interaction
- Deliver secure and fast healthcare support
- Support students, doctors, and patients



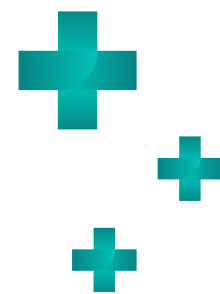




# PROBLEM STATEMENT

- Limited access to healthcare in remote/rural areas
- Patients often face confusion about symptoms & treatment
- Need for quick, reliable, and affordable medical guidance





# TOOLS USED

**hugging face**



**google colab**



**github**



**gradio**





# TECHNOLOGY USED

## **IBM GRANITE LM**

core AI engine

## **GOOGLE COLLAB**

deployment platform

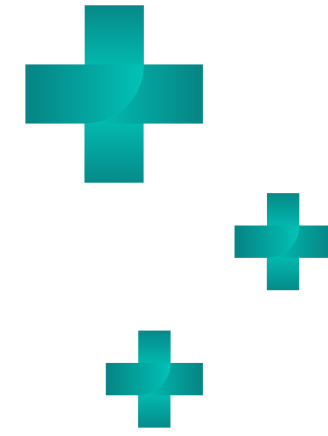
## **PYTHON AND ML LIBRARIES**

Python & ML libraries – model

## **SECURE AI WORKFLOW**

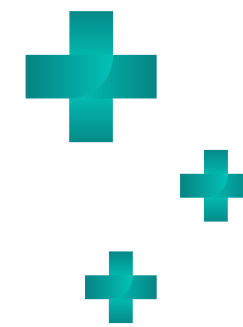
Secure AI workflows for data handling

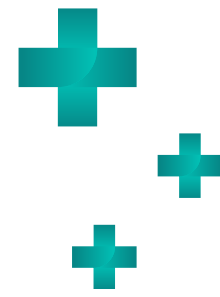




# KEY FEATURES

- Patient Chat (AI-driven Q&A)
- Disease Prediction (based on symptoms)
- Treatment Plans (basic medical suggestions)
- Expandable features (diet advice, fitness tips, mental health support)





## **BENEFITS FOR PATIENTS**

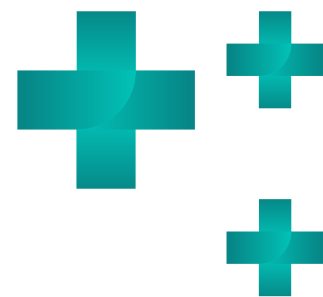
**Faster answers to health queries**

**24/7 virtual health support**

**Better care navigation**

**Increased trust through reliable AI responses**

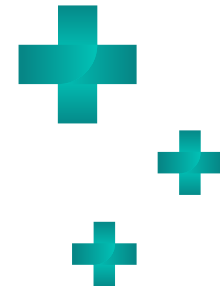




## WHY IBM GRANITE?

- Optimized for enterprise AI
- Domain adaptability (fine-tuning for healthcare)
- Strong privacy & governance features
- Scalable across cloud and on-prem systems





# TARGET USERS

- **Primary: Patients (self-care, chronic disease, remote consultations)**
- **Secondary: Clinicians (decision support, admin relief)**
- **Tertiary: Healthcare organizations (cost savings, efficiency)**



# SYSTEM ARCHITECTURE

- Frontend: Conversational interface (web, mobile, voice)
- Backend: IBM Granite LLM + fine-tuned healthcare models
- Data: Secure integration with EHRs, IoT health devices
- Governance: Compliance & monitoring layers







# IBM GRANITE ADVANTAGES

- Open, trustworthy foundation models
- Energy-efficient AI training
- Industry-ready deployment
- Strong ecosystem support from IBM

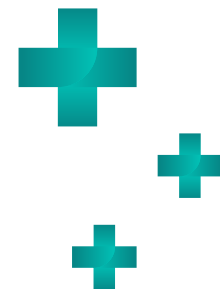




# EXAMPLE CLINICIAN WORKFLOW

- Doctor meets patient
- HealthAI transcribes & summarizes conversation
- Suggests diagnostic tests / treatment options
- Generates structured EHR notes automatically
- Provides follow-up reminders to patients

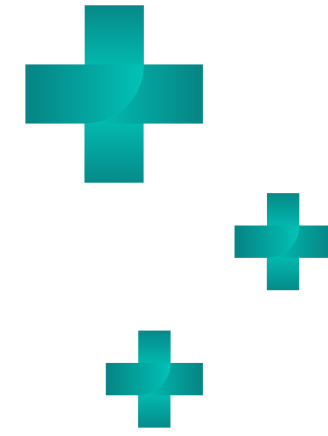




## AI ETHICS & TRUST

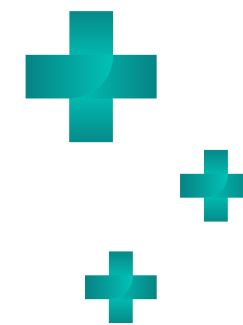
- **Transparency in recommendations**
- **Avoiding bias in medical advice**
- **Clear disclaimers (not a substitute for professional care)**
- **Patient data ownership & control**

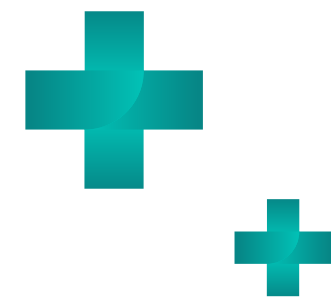




# FUTURE VISION

- Integration with wearable health devices (Fitbit, Apple Watch)
- Predictive analytics for early disease detection
- AI-assisted telemedicine consultations
- Expansion to global, multilingual healthcare support





# THANKYOU

