

Project Documentation – HealthAI

1. Introduction

- **Project Title:** HealthAI – Intelligent Healthcare Assistant Using IBM Granite
- **Team ID:** LTVIP2025TMID33300
- **Team Members:**
 1. Chigirala Ankitha
 2. Rishitha Akula
 3. Kota Vishnupriya

2. Project Overview

Purpose:

HealthAI is a responsive web application designed to offer users instant, AI-powered medical assistance. Through a conversational interface, users can describe their symptoms and receive probable disease predictions and personalized treatment suggestions. The goal is to support early detection and improve accessibility to health advice.

Key Features:

- AI-powered chatbot for symptom interaction
- Disease prediction based on user inputs
- Treatment guidance tailored to age/gender
- Clean, responsive design built with Tailwind CSS
- Vite-powered build for lightning-fast performance
- Secure environment variable management

3. Architecture

Frontend:

- Built using React.js + TypeScript
- Managed using Vite (fast bundler)
- Styled using Tailwind CSS
- Axios for potential backend/API integration
- Static hosting-ready build

AI Layer (optional backend/extension):

- Communicates with IBM Granite for LLM-based analysis
- Can be integrated via REST API or Python bridge if needed

Data Handling:

- Feedback and history can be stored in a connected backend (optional future enhancement)

4. Setup Instructions

Prerequisites:

- Node.js (v14 or higher)
- VS Code or any modern code editor
- Optional: Netlify CLI (for deployment)

Installation:

`npm install` # Install dependencies

`npm run dev` # Start local development server

Environment:

- Rename `.env.example` to `.env`
- Add environment-specific variables (e.g., API URLs, keys)

5. Folder Structure

`src/` – Source Files

File/Folder	Description
<code>components/</code>	Reusable UI like AuthModal, Header, ChatInterface
<code>App.tsx</code>	Main component wrapping the app structure
<code>main.tsx</code>	Renders the app into the DOM using Vite
<code>index.css</code>	Tailwind and custom global styling

Root Configuration

File	Purpose
index.html	Base HTML template rendered by Vite
package.json	Project dependencies and scripts
package-lock.json	Exact package versions (auto-managed)
.env.example	Template for environment variables
.gitignore	Ignores files for version control (e.g., node_modules)

⚙️ Build Configuration

File	Purpose
postcss.config.js	PostCSS setup for Tailwind
tailwind.config.js	Tailwind utility-first CSS settings
tsconfig.json	TypeScript compiler settings
tsconfig.node.json	Node + Vite TypeScript settings
vite.config.ts	Vite-specific configuration

🎨 Other Files

File	Description
styles.css	Extra styling outside Tailwind
script.js	Utility or global JS logic (non-React)

📁 dist/ – Build Output

- Auto-generated after running `npm run build`
- Contains optimized static files ready for deployment (e.g., to Netlify)

6. Running the Application

Start Dev Server:

```
npm run dev
```

Create Production Build:

```
npm run build
```

Preview Build (Optional):

```
npm run preview
```

7. Deployment

You can deploy the `dist/` folder to:

- [✓] Netlify
- [✓] Vercel
- [✓] GitHub Pages (with adapter)

8. Known Issues

- AI responses currently mocked or fetched from pre-defined data
- No backend authentication or data storage yet
- No live chat or doctor portal (planned in future)

9. Future Enhancements

- Integrate live IBM Granite API
- Add backend for symptom history tracking
- Authentication and protected routes
- Multi-language support
- Progressive Web App (PWA) version
- Admin dashboard for healthcare partners

10. User Interface

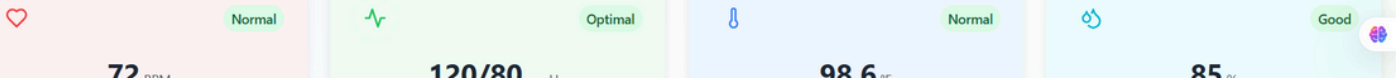


HealthAI

Your intelligent healthcare companion powered by advanced AI. Get personalized health insights, symptom analysis, and wellness recommendations 24/7.

 [Start Health Consultation](#)

Real-time Health Monitoring



Continue your health journey with Dr. HealthAI



Welcome, Ankithachigirala! 🍌
This will be your display name in consultations

Email Address

 ankithachigirala@gmail.com

Password


[→ Start Health Session](#)

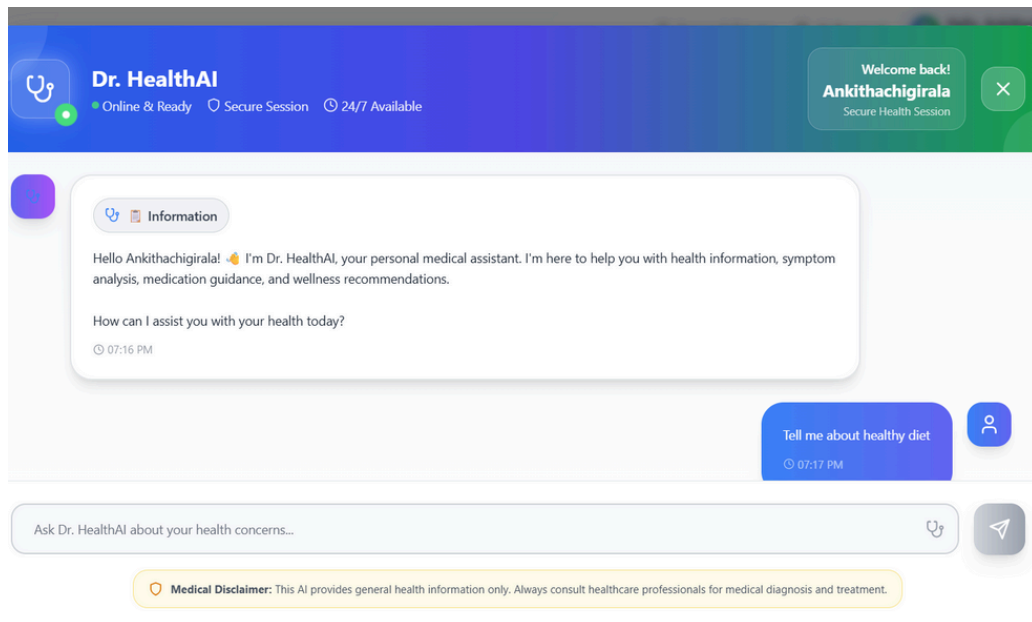
New to HealthAI?

[Create New Account](#)



Your Privacy & Security

 Your health data is encrypted end-to-end and never shared with third parties. We comply with HIPAA.



10. Testing

Manual testing with demo credentials:

- patient: <https://effervescent-youtiao-607c24.netlify.app>
- Owner: <https://effervescent-youtiao-607c24.netlify.app>
- Admin: <https://lustrous-rugelach-aa4d9b.netlify.app/>