HealthAI: Intelligent Healthcare Assistant using IBM Granite

Overview

HealthAI is a conversational healthcare assistant powered by IBM Granite (a large language model) and built with Streamlit. It aims to provide quick, accurate, and intelligent responses to user queries related to health, symptoms, treatments, and wellness, using the power of Generative AI.

Features

- Real-time Chat Interface.
- Secure API Integration.
- Easy Web Deployment using Streamlit.
- Chat History Tracking.

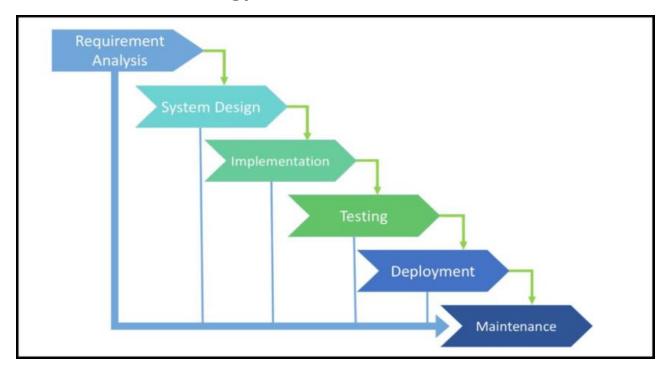
Project Structure

HealthAI/ ├— app.py # Main chatbot interface ├— .env # Stores API credentials ├— requirements.txt # Python dependencies └— README.md # Project documentation

Installation & Setup

- Python 3.8+
- IBM Cloud API key and endpoint

SDLC and Methodology



Technologies Used

- **Streamlit** UI for the chatbot
- Python Backend logic
- IBM Granite Large Language Model
- dotenv Environment variable management
- Requests For API communication

Example Questions

- "What are the symptoms of COVID-19?"
- "How can I reduce my blood sugar levels?"
- "Is it safe to take paracetamol during pregnancy?"
- "Suggest a diet for high cholesterol."

Q How It Works

- 1. **User Input**: The user asks a health-related question.
- 2. **Processing**: The Streamlit frontend sends the message to the backend.
- 3. API Call: The backend uses requests to call the IBM Granite model.
- 4. **Response**: The model generates a reply, which is shown to the user.

References

- IBM watsonx Granite Models
- Streamlit Docs
- Python dotenv