

Project Design Phase
Proposed Solution Template

Date	27 june 2025
Team ID	LTVIP2025TMID59171
Project Name	HealthAI: Intelligent Healthcare Assistant Using IBM Granite
Maximum Marks	2 Marks

Proposed Solution Template: Health AI

S.No.	Parameter	Description
1	Problem Statement	Many individuals delay visiting a doctor due to minor symptoms, lack of awareness, or access issues. This results in late diagnoses and deteriorating health. There is a need for an AI-based system that can help users assess their symptoms, monitor vitals, and get personalized guidance from the comfort of their homes.
2	Idea / Solution Description	<p>Health AI is an AI-powered web and mobile application that allows users to:</p> <ul style="list-style-type: none">– Enter symptoms and get disease predictions using AI/ML models– Chat with a healthcare assistant for real-time advice– Track vital parameters (heart rate, BP, glucose) and view graphical trends– Store and manage medical history– Access preventive care suggestions. <p>The backend is powered by IBM Granite or Hugging Face models, while the frontend uses Streamlit.</p>
3	Novelty / Uniqueness	<ul style="list-style-type: none">– Combines symptom-based AI predictions, vitals monitoring, and AI chat in one system– Uses powerful open-source models (e.g., Hugging Face, IBM Granite)– Real-time vitals graphing and health trend prediction– Integration with external APIs (e.g., Aadhar for verification, IBM Watson for NLP)– Focus on affordable AI-driven early diagnosis.
4	Social Impact / Customer Satisfaction	<ul style="list-style-type: none">– Increases access to primary health advice in remote and underserved areas– Reduces unnecessary hospital visits and crowding– Encourages health monitoring and preventive care– Provides 24x7 AI support for common health concerns

		<ul style="list-style-type: none"> – Enhances user satisfaction with quick, accurate, and personalized advice.
5	Business Model (Revenue Model)	<ul style="list-style-type: none"> – Freemium Model: Basic features free; premium version includes unlimited predictions, full chat history, downloadable reports – Subscription Plans for clinics or telemedicine partners – API-as-a-Service for other health apps and hospitals – Advertisements from health products or services (non-intrusive)
6	Scalability of the Solution	<ul style="list-style-type: none"> – Deployed on IBM Cloud or Kubernetes, scalable for thousands of users – Modular architecture supports adding new features (e.g., mental health AI) – Easy integration with IoT health devices and wearable sensors – Scalable backend APIs to support real-time chat, prediction, and data storage