Project Design Phase-II
Solution Requirements (Functional & Non-functional)

Date	27 July 2025
Team ID	LTVIP2025TMID29210
Project Name	Health AI: Intelligent HealthCare Assistant using IBM Granite
Maximum Marks	4 Marks

Functional Requirements:

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Profile Management	Manage patient details (Name, Age, Gender, Blood Type, Profile Pic)
FR-2	Patient Chat Assistant	Query submission and AI response using IBM Granite (Patient Queries
FR-3	Disease Prediction	Symptom input form, AI-based disease prediction with likelihood percentages.
FR-4	Treatment Plan Generator	Condition input and AI-generated personalized treatment plan.
FR-5	Health Analytics Dashboard	Display patient health metrics (Heart Rate, BP, Glucose Trends) using Plotly.
FR-6	Navigation and Home Landing Page	Streamlit-based multi-page navigation (Home → Chat → Prediction → Treatment → Analytics).

Non-functional Requirements:

Following are the non-functional requirements of the proposed solution.

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	Clean, responsive UI using Streamlit with custom CSS styling for healthcare look.
NFR-2	Security	API key management with dotenv, secure IBM Watson API calls, and data confidentiality
NFR-3	Reliability	Should handle multiple simultaneous patient queries and API calls without crash
NFR-4	Performance	Average AI response time within 2–4 seconds for chat, disease prediction, and treatment generation.
NFR-5	Availability	HealthAI should be accessible 24/7 with minimal maintenance, hosted on Replit or Streamlit Cloud.
NFR-6	Scalability	Easily extendable to add new AI models (e.g., IBM Granite upgrades) or more healthcare features.