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

Date	30 June 2025
Team ID	LTVIP2025TMID32662
Project Name	Intelligent Healthcare assistant using IBM Granite
Maximum Marks	4 Marks

Functional Requirements:

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	**AI Query Processing**	The system must accept natural language text input from the user.
FR-2	**symptom Checker**	The system shall analyze user-described symptoms and generate a list of potential considerations.
FR-3	**Prescription Analysis**	The system shall extract key details (drug, dosage, frequency) from prescription text.
FR-4	**Diet Recommendation**	The system shall generate a relevant diet plan based on a user's stated health goals.
FR-5	**User Interface (UI)**	The system must display a three-card layout for the different functionalities.
FR-6	**Safety & Compliance**	The system must append a disclaimer to every AI response advising users to consult a professional.

Non-functional Requirements:

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	the user interface must be intuitive and easy to navigate for non-technical users on both desktop and mobile devices.
NFR-2	**Security**	All API keys and credentials must be stored securely on the backend and never exposed to the client-side. Communication with the IBM API must use HTTPS.
NFR-3	**Reliability**	The application must handle common user errors (e.g., empty submissions) gracefully without crashing.
NFR-4	**Performance**	The end-to-end response time for an AI query, from submission to displaying the result, should ideally be under 10 seconds.
NFR-5	**Availability**	The application should be available to users 24/7, with downtime only for planned maintenance. (This is dependent on the cloud service uptime).
NFR-6	**Scalability**	The backend architecture (FastAPI & IBM Watsonx) must be capable of handling an increasing number of concurrent users without performance degradation.