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

Date	26June 2025
Team ID	LTVIP2025TMID31494
Project Name	HealthAI: Intelligent Healthcare Assistant
Maximum Marks	4 Marks

✅ Functional Requirements (FR)

ID	Requirement Description
FR1	The system shall prompt the user to input their name.
FR2	The system shall ask the user to enter their symptoms as a comma-separated string.
FR3	The system shall parse and clean the input symptoms list.
FR4	The system shall construct a prompt to send to the IBM Granite model using the provided symptoms.
FR5	The system shall use the Hugging Face transformers library to tokenize input and generate a response from the model.
FR6	The system shall decode the AI-generated response and display it as a list of suggested medical conditions.
FR7	The system shall display a disclaimer that it is not a medical diagnosis.
FR8	The system shall display the current timestamp when the results are shown.
FR9	The system shall terminate cleanly after one interaction or allow repeated interactions in a loop (if extended).

⚙️ Non-Functional Requirements (NFR)

ID	Requirement Description
NFR1	The system should provide a response within 5–10 seconds of submitting symptoms.

NFR2 The interface should be usable from any standard Python environment (terminal/console).

NFR3 The IBM Granite model must be accessible through the Hugging Face transformers interface.

NFR4 The code must follow modular programming practices (e.g., ask_granite() as a separate function).

NFR5 The system must run on a device with sufficient resources to load the IBM Granite 3.3B model (e.g., 8+ GB RAM recommended).

NFR6 The system should not store or share user data by default.

NFR7 The assistant should be extensible to support new features (e.g., history logging, GUI, multilingual input).

NFR8 The system should clearly separate user prompts, AI responses, and warnings for readability.
