

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

Date	28 June 2025
Team ID	LTVIP2025TMID3098
Project Name	Sustainable Smart City Assistant using IBM Granite Model
Maximum Marks	4 Marks

Functional Requirements:

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Symptom Input	<ul style="list-style-type: none">- Users can input city-related queries via chat or search field- Support for both simple and complex city management queries (e.g., pollution, traffic)
FR-2	AI-Powered Health Response	<ul style="list-style-type: none">- Generate real-time responses using IBM Granite Model- Provide reliable sustainability metrics with clear disclaimers
FR-3	User Authentication	<ul style="list-style-type: none">- Login with email/password- Optional: Social login for citizens or officials (e.g., Google, municipal accounts)
FR-4	Session History (Optional)	<ul style="list-style-type: none">- View previous city queries or reports- Option to export, download, or clear history manually
FR-5	Admin Dashboard	<ul style="list-style-type: none">- Track usage patterns, system performance, and insight accuracy- Visual analytics for administrators
FR-6	Error Handling & Fallback	<ul style="list-style-type: none">- Provide user-friendly error messages- Fallback responses or escalation when AI is unable to answer

Non-functional Requirements:

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	The interface should be intuitive, responsive, and accessible across devices (web & mobile).
NFR-2	Security	All data, including city insights and user information, must be encrypted; access must use secure authentication methods.
NFR-3	Reliability	The system must deliver consistent performance and accurate city data without failures.
NFR-4	Performance	AI-generated city insights should be delivered within 2 seconds under normal operational load.
NFR-5	Availability	<ul style="list-style-type: none">- The Smart City Assistant should be available 24/7 with at least 99.9% uptime.- The Smart City Assistant should be available 24/7 with at least 99.9% uptime.
NFR-6		

	Scalability	The platform should support scaling to handle data and requests from multiple cities and thousands of concurrent users.
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