

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

Date	27 June 2025
Team ID	LTVIP2025TMID31710
Project Name	Sustainable Smart City AI Assistant with IBM Granite LLM
Maximum Marks	4 Marks

Solution Requirement

Functional Requirements:

Following are the functional requirements of the proposed solution.

FR No	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	City Selection & Dashboard	Dropdown to choose city, auto-fetch metrics
FR-2	Chatbot & Summarizer	Prompt input, LLM-based response, File upload & summarization
FR-3	KPI Forecasting	File upload, prediction with Prophet, result visualization
FR-4	Anomaly Detection & Alerts	Upload dataset, detect outliers, show alerts in dashboard
FR-5	Eco Tips & Feedback	Tip submission form, feedback capture

Non-Functional Requirements:

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

FR No	Non-Functional Requirement	Description
NFR-1	Usability	Clean, responsive Streamlit UI with user-friendly navigation
NFR-2	Security	API key management through Streamlit Secrets; no hardcoded credentials
NFR-3	Reliability	Handles unexpected inputs, fallback for API failures
NFR-4	Performance	Real-time API responses under 2 seconds for most features
NFR-5	Availability	Hosted 24/7 on Streamlit Cloud with minimal downtime
NFR-6	Scalability	Modular backend to add more cities or APIs easily