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

Date	27 June 2025
Team ID	LTVIP2025TMID36160
Project Name	Citizen AI – Intelligent Citizen Engagement Platform
Maximum Marks	4 Marks

Functional Requirements:

The following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Registration	Registration through Form Registration through Gmail Registration through LinkedIn
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	Real-Time AI Chat Interaction	Submit Query to Chatbot Receive Contextual AI Response Report Issue or Request Info
FR-4	Sentiment Feedback System	Submit Text Feedback Analyze Sentiment Store Feedback to Database
FR-5	Admin Dashboard	View Sentiment Trends Track User Queries & Volumes Visualize Issue Categories
FR-6	Personalized Response Engine	Identify User Context Generate a Tailored Answer using IBM Granite

Non-functional Requirements:

The following are the non-functional requirements of the proposed solution.

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	The platform should have an intuitive UI with a simple, clean interaction flow for citizens.
NFR-2	Security	IBM IAM, HTTPS, and API key authentication must be used to protect all endpoints and data.
NFR-3	Reliability	The system should handle errors gracefully, retry failed processes, and ensure minimal downtime
NFR-4	Performance	Responses should be delivered within 1–2 seconds on average; AI calls should be optimized.
NFR-5	Availability	The application should ensure 99.9% uptime using IBM Cloud infrastructure and failover mechanisms.
NFR-6	Scalability	The backend should scale horizontally to handle increased user load and concurrent chatbot sessions.