

Project Design Phase-II

Solution Requirements (Functional & Non-functional)

Date	31 January 2025
Team ID	LTVIP2025TMID32100
Project Name	Citizen AI
Maximum Marks	4 Marks

Functional Requirements:

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	Chat-based Citizen Interaction Interface	<ul style="list-style-type: none">- Develop a Gradio interface to handle user input and output in chat format- Support free-text natural language queries- Display welcome message, prompts, and fallback responses
FR-2	Issue Reporting & Categorization	<ul style="list-style-type: none">- Enable reporting of civic issues like potholes, water problems, streetlight- Automatically categorize the type of complaint using NLP

FR-3	Information Delivery About Government Services	<ul style="list-style-type: none"> - Allow users to ask questions about schemes, eligibility, and required documents - Provide AI-generated responses based on trained or integrated datasets
FR-4	Response Generation & Confirmation	<ul style="list-style-type: none"> - Display instant, AI-generated responses in a human-like tone

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	The platform must have a simple and intuitive user interface (Gradio), ensuring ease of use for all age groups including non-tech-savvy users.
NFR-2	Security	User data (queries, reports) must be handled with privacy and care. Any future storage of data must comply with data protection standards.
NFR-3	Reliability	The system should consistently provide correct, AI-generated responses and not crash during user interaction.

NFR-4	Performance	The chatbot should respond to queries within 2–3 seconds to maintain a smooth conversational experience.
NFR-5	Availability	The system should be accessible 24/7 via the hosted Gradio interface (as long as the backend is active).
NFR-6	Scalability	The platform should support transition from prototype (Gradio on Colab) to production (FastAPI, cloud deployment) with higher user load.