**Project Design Phase-II**

**Solution Requirements (Functional & Non-functional)**

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| Date | 26 June 2025 |
| Team ID | LTVIP2025TMID35580 |
| Project Name | Citizen AI – Intelligent Citizen Engagement Platform |
| Maximum Marks | 4 Marks |

**Functional Requirements:**

Following are the functional requirements of the proposed solution.

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| **FR No.** | **Functional Requirement (Epic)** | **Sub Requirement (Story / Sub-Task)** |
| FR-1 | User Chat Interaction | |  | | --- | | Send text prompt through Gradio interface, Display AI-generated response from IBM Granite model |  |  |  | | --- | --- | |  |  | |
| FR-2 | Model Integration | Load IBM Granite 3.3–2B Instruct model from Hugging Face, Run text generation using transformers pipeline |
| FR-3 | |  | | --- | |  |  |  | | --- | | Interface Setup | | Create web-based chatbot using Gradio, Provide a shareable public URL for access |
| FR-4 | Real-Time Query Handling | Capture user input in real time and return dynamic responses |

**Non-functional Requirements:**

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

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| **FR No.** | **Non-Functional Requirement** | **Description** |
| NFR-1 | **Usability** | Simple, intuitive Gradio interface for easy use by citizens |
| NFR-2 | **Security** | Hugging Face token usage restricted and hidden; model runs locally |
| NFR-3 | **Reliability** | Model consistently responds with relevant answers under varied prompts |
| NFR-4 | **Performance** | Model loaded locally to reduce response latency and API dependency |
| NFR-5 | **Availability** | Gradio public link allows access from anywhere during the demo period |
| NFR-6 | **Scalability** | Modular architecture allows future integration with dashboards or sentiment AI |