**Project Design Phase-II**

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

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| Date | 20 jun 2025 |
| Team ID | LTVIP2025TMID32673 |
| Project Name | Sustainable Smart City Assistant AI by using IBM granite LLM |
| Maximum Marks | 4 Marks |

**Functional Requirements**

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| --- | --- | --- |
| FR No. | Functional Requirement (Epic) | Sub Requirement (Story / Sub-Task) |
| FR-1 | User Registration | - |
| FR-2 | User Confirmation | - |
| FR-3 | Dashboard Access | - View energy, water, waste usage - Access personalized AI insights - Multilingual support |
| FR-4 | Real-time Alerts | - Pollution level warnings - Water leakage or outage alerts - Traffic congestion notifications |
| FR-5 | Feedback Submission | - Feedback form interface - Rating service quality - Submit suggestions or issues |
| FR-6 | Admin Panel | - Monitor system performance - Access user feedback - View predictive maintenance alerts |

**Non-functional Requirements**

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| NFR No. | Non-Functional Requirement | Description |
| NFR-1 | Usability | The interface will be intuitive, responsive, and accessible on mobile, web, and voice platforms. |
| NFR-2 | Security | All user data will be encrypted in transit and at rest. Role-based access control will be enforced. |
| NFR-3 | Reliability | The system will have failover mechanisms and 99.9% uptime. |
| NFR-4 | Performance | The AI assistant will respond to user queries within 2 seconds under average load. |
| NFR-5 | Availability | System will be available 24/7 with monitoring and automatic recovery features. |