

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

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| Date | 02 February 2026 |
| Team ID | LTVIP2026TMIDS66287 |
| Project Name | Flavour Fusion: Ai-Driven Recipe Blogging |
| 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 | Recipe Input Module | Enter recipe topic Select word count |
| FR-2 | Input Validation | Validate empty input Validate word count range |
| FR-3 | AI Integration | Connect to Gemini Flash Lite API Send structured prompt to model |
| FR-4 | Recipe Generation | Generate structured recipe blog Include introduction, ingredients, steps |
| FR-5 | Output Display | Display generated recipe in UI Allow user to copy content |
| FR-6 | Additional Feature | Generate programming joke (optional feature) |

Non-functional Requirements:

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

| FR No. | Non-Functional Requirement | Description |
|--------|----------------------------|---|
| NFR-1 | Usability | The application must have a simple and intuitive Streamlit interface that is easy to use. |
| NFR-2 | Security | API keys must be securely stored and not exposed in the frontend. |
| NFR-3 | Reliability | The system should generate consistent and structured outputs for valid inputs. |
| NFR-4 | Performance | Recipe generation should complete within a few seconds. |

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| NFR-5 | Availability | The application should be accessible online whenever deployed. |
| NFR-6 | Scalability | The system should handle multiple users without significant performance degradation. |