**Project Design Phase-II**

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

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| Date | 03 July 2025 |
| Team ID | LTVIP2025TMID51444 |
| Project Name | Comprehensive Analysis and Dietary Strategies with Tableau: A College Food Choices Case Study |
| 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 | Data Collection | Collect food consumption data from students via online surveys or forms |
| FR-2 | Data Integration | Import data into Tableau from Excel, Google Sheets, or SQL databases |
| FR-3 | Data Visualization | Create charts and dashboards (e.g., calorie intake trends, food type frequency) |
| FR-4 | Nutritional Analysis | Analyze data to assess nutrient balance, deficiencies, and dietary patterns |
| FR-5 | Personalized Dietary Suggestions | Provide food recommendations based on user input or analysis output |
| FR-6 | Filtering and Interactivity | Allow users to filter results by age, gender, meal type, or location |
| FR-7 | Report Generation | Generate downloadable PDF/Excel reports on individual and group food habits |

**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** | Dashboards should be user-friendly and easy to navigate for non-technical users |
| NFR-2 | **Security** | SecurityEnsure data privacy for individual food records and personal |
| NFR-3 | **Reliability** | System should consistently produce accurate analysis and insights |
| NFR-4 | **Performance** | Dashboards should load within 3 seconds even with large datasets |
| NFR-5 | **Availability** | System should be accessible 24/7 during the research period |
| NFR-6 | **Scalability** | Should support increasing users/data volume as more colleges join the study |