Project Design Phase-II

Solution Requirements (Functional & Non-functional)

Date	26 June 2025
Team ID	LTVIP2025TMID20798
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:

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Registration & Access	- Register via form - Login via email (student/admin)
FR-2	Survey & Data Collection	- Student fills out dietary behavior survey - Admin uploads datasets (CSV/Excel)
FR-3	Dashboard Access	- Role-based dashboard views after login
FR-4	Dietary Behavior Visualization	- Charts for meal frequency, skipping, snacking, and cost-based habits
FR-5	Nutritional Insights Visualization	- Visualization of calorie intake, food groups, and nutrition score
FR-6	Academic & Mood Correlation	- Analysis of GPA, stress, and sleep patterns in relation to diet
FR-7	Filtering and Segmentation	- Filter data by gender, major, residence type, or physical activity
FR-8	Dietary Strategy Recommendations	- Show tailored recommendations (e.g., healthy swaps, meal planning tips)
FR-9	Export and Report Generation	- Export dashboards as PDF or images - Download summary nutrition reports

FR-10	Admin Data Management	- Admins can upload, approve, and refresh survey datasets

Non-Functional Requirements

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

NFR No.	Non-Functional Requirement	Description
NFR-1	Usability	The interface should be intuitive and accessible across mobile and desktop.
NFR-2	Performance	Dashboards and filters must load within 3 seconds with large datasets.
NFR-3	Security	All user data and responses must be encrypted and securely stored.
NFR-4	Reliability	The system must operate consistently without crashes or major bugs.
NFR-5	Scalability	The platform should handle increasing data across semesters or institutions.