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

Date	23 june 2025
Team ID	LTVIP2025TMID51515
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	Data gathering	Collect data on student demographics,food choices,nutrition intake,and preferences from surveys or institutional sorces
FR-2	Data cleaning and preparation	Remove duplicates handle missing or inconsistent values,categorize dietary patterns, and normalize data for analysis
FR-3	visualization	Create insight visualization in tableau such as: Calorie intake vs gender/age Food preferences by mealtype Nutrition intake vs physical activity Dietary habits vs gpa Vitamin consumption vs food categories
FR-4	Dash board development	Develop interactive tableau dash board for visual exploration,filtering,and comparison of dietary trends and strategies

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	Dashboards must be user friendly with clear visualization easy navigation and intuitive filters
NFR-2	**Security**	Implement secure access to data with role based permissions and data encryption
NFR-3	**Reliability**	Ensure reliable data updates and consistent access to accurate ,real time insights
NFR-4	**Performance**	Visualizations must load within 5 seconds and respond efficiently to filter changes
NFR-5	**Availability**	Dashboards should be accessible 24/7 with less than 1% monthly downtime
NFR-6	**Scalability**	System must scale to accommodate increasing student data without affecting performance