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

Date	03 October 2022
Team ID	PNT2022TMID14661
Project Name	AI-powered Nutrition Analyzer for Fitness Enthusiasts
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	Registration through Form Registration through Gmail Registration through Facebook
FR-2	User Confirmation	Confirmation via Email
FR-3	Scan/Upload Food Items	Provide options to scan the fruits or upload the photo of the fruits the user takes.
FR-4	Show Nutritional Analysis	Use the AI Model to predict the fruits and an External API to know the calories and nutrition content of the corresponding fruit.
FR-5	Calorie Consumption Alert	Enable the user to set a daily calorie limit and alert the user if his food consumption exceeds the limit
FR-6	View calorie consumption of earlier days	Provide visualizing options for the user to compare the calorie intake of day, afternoon, and night of last month.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	❖ The website's interface is user-friendly and easy to use. ❖ Provide scanning options for mobile users and uploading options for laptop users.
NFR-2	**Security**	❖ Users have to first signup with email and password. ❖ Only authenticated users can login and make use of the website. ❖ The user credentials are stored securely in the database with hashing techniques. ❖ Authorized admins only can make changes to the data. ❖ Managing and Enabling CORS, preventing SQL and other kinds of injections.

NFR-3	**Reliability**	The system must perform without failure in 95 percent of use cases during a month.
NFR-4	**Performance**	The AI Model API supports 500 users per hour must provide 6 second or less response time in a Chrome desktop browser.
NFR-5	**Availability**	The website must be available to the Indian users, 95 percent of the time every month during business hours IST.
NFR-6	**Scalability**	The system must be scalable enough to support 1000 visits at the same time while maintaining optimal performance.