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

Date	29 October 2022
Team ID	PNT2022TMID47872
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 LinkedIn
FR - 2	User Confirmation	Confirmation via Email Confirmation via OTP
FR - 3	User Interface	Intuitive and easy to navigate
FR - 4	Business Model	Business Model
FR - 5	Dataset Collection	Daily intake of calories and food physical activities
FR - 6	Training and Testing	Providing necessary information with great accuracy

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	➢ Effective in changing eating behavior and diet-related health risk factors ➢ Factors influencing engagement with mobile weight loss and weight maintenance interventions. ➢ These factors include personalization, simplicity,

		entertainment, usability, social support, and the presence of certain features such as self-monitoring, and prompts. ➢ However, it can be used for a variety of goals, including self-monitoring, eating healthier, or even gaining weight, which again may reflect a variety of underlying motivations including health status and specific needs and expectations
NFR-2	**Security**	➢ User friendly. ➢ Protect and maintain the security of the details of users. ➢ Data piracy and cyber threats are prevented. ➢ Detects any intrusions and ➢ Prevent unwanted advertisements during the progress and process of the consulting
NFR-3	**Reliability**	➢ The app promotes self-efficacy by allowing users to track their diet progress and work toward simple personal goals. ➢ Trustworthy ➢ Ensure permission and got qualifications from the articles according to the nutrient app maintenance and treating people. ➢ Updates the app periodically to make comfort people.
NFR-4	**Performance**	The AI-based model is built by using Image/object recognition and classification using CNN. By using this, ➢ The user interacts with the UI and gives the image as input. ➢ Then the image will pass to our flask application. ➢ Finally, our model classifies the result and showcases it on the UI

NFR-5	**Availability**	➢ Consulting with Dietitian and Nutritionist. ➢ Searching websites about their foods. ➢ Attending weight loss programs and treatments.
NFR-6	**Scalability**	Through this system, the user can efficiently and effectively understand their: ➢ Daily eating habits ➢ Explore nutrition patterns ➢ Maintain a healthy diet. ➢ Best for meal planning ➢ Best for finding a diet-friendly restaurant ➢ Best for creating custom grocery lists ➢ Best for pregnant people's health ➢ Best for meeting healthy eating goals ➢ Best for those with food intolerances ➢ Best for counting calories ➢ Best for forming healthy eating habits ➢ Best for promoting a healthy body image ➢ Best for intuitive eating