

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

Date	20 October 2022
Team ID	PNT2022TMID26372
Project Name	Project - 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
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	Image Acquisition	Capture the Image and Check the Top and Side View of Image
FR-4	Object Detection	Get a series of Bounding Boxes, which means objects are located.
FR-5	Image Segmentation	Get a series of food images stored in matrix with values of background pixels replaced by zeros.
FR-6	Volume Estimation	To estimate the volume, calculate the scale factors on calibration objects.
FR-7	Calorie Estimation	After estimating the volume, the next step is to estimate each food's mass

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	Informs you how nutrient dense your food is.
NFR-2	Security	The information is visible to user only and image was secured highly.
NFR-3	Reliability	The food packages are important for calculate the calories
NFR-4	Performance	It is based on the package of food used for the calorie calculation
NFR-5	Availability	It is available for all users to calculate the calorie of the foods
NFR-6	Scalability	Increasing the calculation of the calorie in foods

