Project Design Phase-I
Proposed Solution

Date	7 October 2022
Team ID	PNT2022TMID29438
Project Name	AI-Powered Nutrition Analyzer For Fitness Enthusiasts
Maximum Marks	2 Marks

Proposed Solution:

S.No.	Parameter	Description
•	Problem Statement (Problem to be solved)	• The main aim of the project is to building a model which is used for classifying the fruit depends on the different characteristics like color, shape, texture etc. • Here the user can capture the images of different fruits and then the image will be sent the trained model. • The model analyses the image and detect the nutrition based on the fruits like (Sugar, Fiber, Protein, Calories, etc.)
•	Idea / Solution description	• The user logins to the system using the login credentials. • The user interacts with the UI (User Interface) and gives the image as input. • Then the input image is passed to the flask application. • Next is to develop an AI model to capture the image and recognize the fruit and find its nutritional values. • And finally with the help of the model which we build we will classify the result and showcase it on the UI.

•	Novelty / Uniqueness	•	This model can capture images and detect the nutritional values of the fruits and showcase it to the user.
		•	Personalized fitness and diet plans for the user.
		•	Uses CNN and AI and ML techniques to improve accuracy of prediction. The info is delivered in a simple and effective UI in the form of a webpage.
•	Social Impact / Customer Satisfaction	•	Helps customers who want to track their nutrient consumption and dietary milestones.
		•	To consult with the nutritionist and personal trainers for their diet plans and training schedules.
		•	Visualization of food appearance.
•	Business Model (Revenue Model)	•	Visit Based Customer acquisition.
		•	Specific diet and fitness plans according to their body type and their goals for the premium subscription members.
		•	Personal trainers to help the fitness enthusiasts with the workouts.
		•	Personal nutritionist for the fitness enthusiast to help with diet plans based on their fitness goals.
•	Scalability of the Solution	•	Focusing on scaling a small number of foods.
		•	The solution is developed in such a way that we can update the system without disturbing the current model.
		•	All the future enhancements can be added to the system without changing the model.