

Project Design Phase-I
Proposed Solution

Date	19 September 2022
Team ID	PNT2022TMID15800
Project Name	AI-powered Nutrition Analyzer for Fitness Enthusiasts
Maximum Marks	2 Marks

Proposed Solution:

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	<ul style="list-style-type: none">• The main aim of the project is to building a model which is used for classifying the fruit depends on the different characteristics like colour, 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, Fibre, Protein, Calories, etc.).
2.	Idea / Solution description	<ul style="list-style-type: none">• The user logins to the system using the login credentials.• The user interacts with the UI (User Interface) and give 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 it's nutritional values.• And finally with the help of the model which we build we will classify the result and showcase it on the UI.

3.	Novelty / Uniqueness	<ul style="list-style-type: none"> • This model can capture images and detect the nutritional values of the fruits and showcase it to the user. • The model collects the user input and prepares diet charts for the user. • Personalized fitness and diet plans for the user.
4.	Social Impact / Customer Satisfaction	<ul style="list-style-type: none"> • Helps the fitness enthusiasts to find the nutritional value of the fruits they're consuming which will help them to maintain a balanced diet by taking adequate amount of nutrients needed every day. • To consult with the nutritionist and personal trainers for their diet plans and training schedules. • Generalised diet and fitness plans to all the users based on their goals.
5.	Business Model (Revenue Model)	<ul style="list-style-type: none"> • 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.
6.	Scalability of the Solution	<ul style="list-style-type: none"> • The solution is developed in the 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.