Project Design Phase-I
Proposed Solution Template

Date	19 September 2022
Team ID	PNT2022TMID35928
Project Name	AI-powered Nutrition Analyzer for Fitness Enthusiasts
Maximum Marks	2 Marks

Proposed Solution Template:

Project team shall fill the following information in proposed solution template.

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	In recent years, the lifestyles of people have changed so much that has to the increasing demand for fast food culture which has led to the ignorance of personal diet and fitness. The lack of focus on these important aspects of life have led to deteriorating effects on the body such as obesity, diabetes and can also lead to heart attack. A multitude of stats present a disappointing reality. The harsh reality is that people start following various fitness programs on social media platforms but they eventually result in vain due to the time constraint and work pressure. However, there has been a new trend of following social media influencers' diet and fitness regimes cannot be verifiable, due to the questionable legitimacy of the claims made presented by them. The most common reason for people to fail in their diet routine is that they lose their confidence after planning different diet plans and failing to follow all of them.
2.	Idea / Solution description	The objective of this project is to develop a fitness tracker which can motivate users to track their diet and stick to their diet without the eventual abatement. The classification of fruits is planned to be based on Convolutional Neural Network. Primarily, the model is trained using a training dataset of several fruits to be able to accurately measure the calories, sugar, fiber and proteins present in a particular fruit.

			In addition to this, based on the image taken by the user, real time processing is done and uploaded to a custom-made website.
3.	Novelty / Uniqueness		The differentiating factor for this project is the intuitiveness that keeps in mind the users' needs and requirements, allowing them to stick to their regimen strictly without any distractions. This is possible with the help of a user-friendly UI along with useful progress tools that helps the user to monitor their daily activities, where only the carefully curated tools that assist people with their daily progress are provided. This project aids fitness enthusiasts to create a flexible and plausible diet schedule that does not stifle their interests eventually. The fruit pointed by the user is further classified based on nutrients such as calories, sugar, fiber present and calories in each fruit is calculated. The data entered by the user is sent to the cloud. Furthermore, the data stored in the cloud returns all necessary statistics which helps the user to track the progress of his/her regimen, thereby motivating them to continue the diet. This project tracks body metrics as well and Suggests fruits based on seasonal availability.
4.	Social Impact / Customer Satisfaction		If a customer has achieved his short time goals through the app, he/she can be rewarded using badges, etc. Also, we can add a feature of progress to show where the customers stand on the path to achieving their goals. Giving compliments and rewards like these helps the customer to stay motivated. Rewards can be used to unlock various features which motivate customers to obtain the reward at any cost. One benchmark you can set is a Net Promoter Score, which basically entails surveying members and seeing how many would recommend the membership to someone else
5.	Business Model (Revenue Model)		The business model will be a freemium model with an add-on subscription. The Freemium model brings in customers who get used to

		basic services like tracking personnel diet which lures them to join subscriptions and gives valuable suggestions to users like dynamic food diet for next few days based on fruits availability, also intake of foods based on weather.
		In order to attract more customers at the initial stage an affiliated-based business model will be used by that user to get certain coupons for the first three customers, they invite to the platform. Also, money can be collected from certain fitness companies to promote their products like whey protein, fitness supplements.
6.	Scalability of the Solution	New machine learning features like identification of rotten fruits, predicting the user's food interest based on food taste, appearance and price etc will be added as exclusive features etc which can be used through subscription.
		To retain customers this application will be extended to fitness watches, and smartphones which will be helpful in recording important vitals thus the validity of data given to the application becomes normalized without false readings.
		Social media features with many trusted fitness experts will be added to promote a healthy lifestyle.