Project Design Phase-I
Proposed Solution Template

Date	19 September 2022
Team ID	PNT2022TMID21658
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)	The main aim of the project is to build a model which is used for identifying the fruit depends on the different characteristics like colour, shape, texture etc. using image processing. Here the user can capture the images will be analysed with the trained model. The model analyses the image and lists out of nutrients present in the fruit like sugar, vitamins, minerals, protein etc.
2.	Idea / Solution description	The idea of this project is that user can capture the images of different fruits and vegetables and then the image will be sent to the trained model. The model analyses the image and detects the nutrition based on the fruits like sugar, Fibre, Protein, Calorie intake, etc. The above idea is achieved by using the CNN (Convolution Neural Network). It is used to pick the raw pixels present in the image. Fruit Recognition using colour and texture features.
3.	Novelty / Uniqueness	The project has several unique features. The main feature is that the user need not have to visit or consult a Nutritionist (or) a Dietician to follow a fit and healthy diet. This project has the feature of analysing the entire nutritional contents of fruits and vegetables by simply scanning them. It provides for a personalized dietary requirement for individuals who have limited preferences while choosing food.
4.	Social Impact / Customer Satisfaction	This project will acquire knowledge and provide information about nutrition. Now a days, no one follows the diet plan. Providing this information, they come to know about the nutrition present in each food item. It is used to schedule a diet plan by taking the image of a food item and if we send it, we can get information about each food nutrition like carbohydrates, fat, proteins, vitamins, minerals,

		and sugar. This will help others to improve their health and fitness.
5.	Business Model (Revenue Model)	Internet (or) Social media is the best way to spread the word about our project and with the help of influencers we can attract normal people. Clustering and targeting the fitness people with the help of local gyms and grounds. Allowing 3rd party vendors to sell their products through our application via advertisements is way to generate money. If the products sold through advertisements, then it is even good.
6.	Scalability of the Solution	Artificial Intelligence (AI) can be used to predict investment outcomes quickly and effectively, as well as to devise strategies or establish long term-goals. Scalable AI pertains to how data models, infrastructure, and algorithms can increase or decrease their complexity, speed, or size at scale in order to best handle requirement of the situation at hand. As improvements continue with data storage capacities as well as computing resource, AI models can be created with millions of parameters. Scaling up nutrition is a global push for action and investment to improve maternal, child nutrition and various health problems.