

Project Design Phase-I
Proposed Solution Template

Date	11 October 2022
Team ID	PNT2022TMID35826
Project Name	Project – 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)	To create an AI Based Nutrition Analyzer for Dieticians and Fitness enthusiasts so that food can be classified based on the nutrients present
2.	Idea / Solution description	To develop a CNN model to classify and detect types of food and nutrients present in it to maintain a proper diet.
3.	Novelty / Uniqueness	A lightweight model of CNN is to be used along with image processing to identify food and nutrients present in it along with the calories that are present in the food. So that food identification takes less time and is easier to do.
4.	Social Impact / Customer Satisfaction	The proposed solution will enable people around the world to be able to keep track of their calorie intake and be able to set goals for themselves that they'd want to hit within a certain period of time. Dieticians and Fitness Enthusiasts will be able to maintain their diet in an efficient way.

5.	Business Model (Revenue Model)	The model will allow fast real-time detection and could have multiple business models like live service subscriptions (Free to use but has Premium and basic plans that are paid) for people who might want some extra features, This model could also be available behind a paywall so that the customer gets everything they need after buying the application.
6.	Scalability of the Solution	The lightweight algorithm can be used with different kinds of mobile apps like exercise apps etc.