

Project Design Phase-I
Proposed Solution Template

Date	16 October 2022
Team ID	PNT2022TMID35778
Project Name	Project - AI-powered Nutrition Analyzer for Fitness Enthusiasts
Maximum Marks	2 Marks

Proposed Solution Template:

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	To develop an AI powered system that identifies edible products and discerns their nutritional information for the benefit of fitness enthusiasts.
2.	Idea / Solution description	<p>The idea is to use convolution neural networks, a type of artificial neural network used in image recognition and processing that is specifically designed to process pixel data, which is used to classify images. Once the row food items have been identified, their corresponding nutritional values are fetched from a database where the relevant details are stored.</p> <p>The application allows for a user to keep track of the amount of calories they consume in a day versus the total recommended amount for their dietary needs.</p>
3.	Novelty / Uniqueness	Nutritional calculator that is straightforward, customizable, and user-friendly. The CNN based fruit classifier that supports nutrition analyser that provides nutrition values of the fruit.
4.	Social Impact / Customer Satisfaction	The proposed application helps fitness enthusiasts monitor their caloric intake and maintain their physical condition with a free programme. This application can help people live healthier lives, regardless of how self-conscious they are about their physical appearance. It keeps track of what users consume, offers recipes and healthy alternatives, as well as fitness schedules.
5.	Business Model (Revenue Model)	Public access to the application is possible after deployment. The software would attract the interest of various people who are motivated to live a healthy lifestyle and desire to change their physical appearance. The programme could be designed so that functions are gradually unlocked based on the membership fee provided by the user, starting from the feature

		that charts out a user's specific plans to the general nutrition analyzer tool.
6.	Scalability of the Solution	There are various features in the suggested application. It can be improved further to incorporate new features based on user comments and ratings. The nutrition analyzer now only works with fruits, but it can be expanded to work with other foods. using a mobile app.