

**Project Design Phase-I**  
**Proposed Solution Template**

Date	19 September 2022
Team ID	PNT2022TMID03894
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)	<ul style="list-style-type: none"><li>• The main aim of the project is to build a model which is used for identifying the fruit depending on the different characteristics like color, shape, texture etc.</li><li>• In this the user can capture the images of different fruits and then the image will be analyzed with the model that are trained.</li><li>• The model analyses the image and lists out the nutrients present in the fruits.</li></ul>
2.	Idea / Solution description	<ul style="list-style-type: none"><li>• The idea of this application is that the user can capture the images of different fruits and vegetables, and then the image will be sent to the trained model.</li><li>• The model analyses the image and detects the nutrition based on the fruits like (Sugar, Fiber, Protein, Calorie intake, etc.). The above idea is achieved by using the Convolution Neural Network (CNN).</li><li>• It is used to pick the raw pixels present in the image. Fruit Recognition using Color and Texture Features.</li></ul>
3.	Novelty / Uniqueness	<ul style="list-style-type: none"><li>• The main feature is that the user need not have to visit or consult a Nutritionist (or) a Dietician to</li></ul>

		<p>follow a fit and healthy diet.</p> <ul style="list-style-type: none"> <li>• This application has the feature of analyzing the entire nutritional content of fruits and vegetables by simply scanning them.</li> <li>• It provides for a personalized dietary requirement for individuals who have limited preferences while choosing food.</li> </ul>
4.	Social Impact / Customer Satisfaction	<ul style="list-style-type: none"> <li>• This will acquire knowledge and provide information about nutrition. These days none of them follows a diet plans. Providing this information, they come to know about the nutrition present in each food item.</li> <li>• It is used to create a diet plan based on the food intake and also keeps track of the nutrients like carbohydrate, fat, proteins, vitamins etc.</li> </ul>
5.	Business Model (Revenue Model)	<ul style="list-style-type: none"> <li>• Social media is the best way to spread the word about application and with the help of influencers we can attract normal people.</li> <li>• Clustering and targeting the fitness people with the help of local gyms.</li> </ul>
6.	Scalability of the Solution	<ul style="list-style-type: none"> <li>• 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, infrastructures, and algorithms can increase or decrease their complexity, speed, or size at scale in order to best handle the requirements of the situation at hand.</li> <li>• As improvements continue with data storage capacities as well as computing resources, AI models can be created with billions of parameters. Scaling up nutrition is a global push for action and investment to improve maternal, child nutrition and various health</li> </ul>

		problems.
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