

Project Design Phase-I
Proposed Solution Template

Date	01 October 2022
Team ID	PNT2022TMID19729
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)	<p>Food is essential for human life and has been the concern of many healthcare conventions. Nowadays new dietary assessment and nutrition analysis tools enable more opportunities to help people understand their daily eating habits, exploring nutrition patterns and maintain a healthy diet. Nutritional analysis is the process of determining the nutritional content of food. It is a vital part of analytical chemistry that provides information about the chemical composition, processing, quality control and contamination of food.</p> <p>The main aim of the project is to building a model which is used for classifying the fruit depends on the different characteristics like colour, shape, texture etc. Here the user can capture the images of different fruits and then the image will be sent the trained model. The model analyses the image and detect the nutrition based on the fruits like (Sugar, Fibre, Protein, Calories, etc.).</p>
2.	Idea / Solution description	Providing accurate identification of the input data and nutritional information based on the data collected in accordance with the user's physical circumstances.
3.	Novelty / Uniqueness	<ul style="list-style-type: none">• These days, additional opportunities exist to assist people in understanding their daily eating habits, examining nutrition patterns, and maintaining a balanced diet thanks to new dietary evaluation and nutrition analysis technologies.• Food contamination, composition processing, and quantity control are all provided by analytical chemistry, which includes the process of analysing the nutritional content of food. We just eat

		<p>on a diet during the day. And a balanced diet is one that has the right amount of each vitamin we need each day.</p> <ul style="list-style-type: none"> • A lifetime of healthy eating is necessary for optimal health. The risk of obesity, coronary heart disease, stroke, some malignancies, type 2 diabetes, high blood pressure, osteoporosis, and tooth decay can all be decreased by eating a balanced diet.
4.	Social Impact / Customer Satisfaction	<ul style="list-style-type: none"> • An individual's nutritional status and social, psychological, and cultural circumstances are related in a cause-and-effect manner. One's eating habits are influenced by cultural norms, economic stability, and views toward health and disease. • A nutritious diet lowers children's chance of developing chronic diseases and promotes healthy growth and development. Adults who follow a healthy diet have a lower risk of obesity, heart disease, type 2 diabetes, and several malignancies. • In addition, diet culture influences the rising prevalence of anorexia, bulimia, binge eating disorder, and avoidant/restrictive food intake disorder, even though negative cultural standards are only one of many factors that contribute to the development of mental health issues and eating disorders.
5.	Business Model (Revenue Model)	<ul style="list-style-type: none"> • Consultation with local nutritionists and trainers for customised strategies. • Adopt a particular diet under the guidance of a professional. • Promote nutritional supplements and fitness equipment. • Advertising for health clubs and hospitals.
6.	Scalability of the Solution	<ul style="list-style-type: none"> • Make at least half of the grains you eat each day whole grains. Whole grain products are a significant source of fibre and energy. • A healthy diet can help you avoid many chronic, non-communicable diseases like cancer, diabetes, and heart disease. • A balanced diet that limits salt, sugar, saturated fats, and trans fats from industrial production is crucial for good health.

