

Ideation Phase

Define the Problem Statements

Date	6 September 2022
Team ID	PNT2022TMID07703
Project Name	AI Powered Nutrition Analyst for Fitness Enthusiasts.
Maximum Marks	2 Marks

Problem Statement:

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. It is a vital part of analytical chemistry that provides information about the chemical composition, processing, quality control and contamination of food.

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 nutritionbased on the fruits like (Sugar, Fibre, Protein, Calories, etc.).

Who does the problem affect?	Old people, Body builders, People with obesity and People with Diabetes who have to watch their food intake.
What are the boundaries of the problem?	The nutrition tracker should account for the weight of the user and height to determine the BMI and then ask the user about the length of nutrition diet and accordingly set the calorie deficit so that the user is able to achieve his/her goal on time

What is the issue?	Nutrition Tracker should be able to calculate the amount of calories in the food that is being consumed by the user and notify the user if the calorie count is about to breach the maximum calorie count. the tracker should also let the user know how many calories they need to burn so that the calorie deficit can help them lose fat/weight
When does the issue occur?	It usually occurs when the person, in this case the user is looking to cut down on their diet in an efficient manner either to lose weight (fat) or keep track of their food intake to keep the underlying diseases under control
Where is this issue occurring?	The nutrition tracker is used by people who need to lose weight but cannot afford personal trainers and dieticians, it helps them keep track of what they eat. It is also used by people who need to keep track of their complications such as diabetes, blood pressure etc.
Why is it important that we fixed the problem?	Because nowadays in a world where people prefer fast food and have no time, it is very important that everyone in general must be in track with their nutrition and provide them with the right options in order to maintain a healthy diet and a good lifestyle.