Ideation Phase
Define the Problem Statements

Date	17 September 2022
Team ID	PNT2022TMID35928
Project Name	AI-powered Nutrition Analyzer for Fitness Enthusiasts
Maximum Marks	2 Marks

PROBLEM STATEMENT

1) Nowadays, Work pressure and fast food culture have taken over people's life so much that they often forget about personal diet and fitness.The lack of focus on these important aspects of life have led to deteriorating effects on the body such as obesity, diabetes and can also lead to heart attack. A multitude of stats present a disappointing reality.

2) It is often observed that people start following various fitness programs on social media platforms but they eventually result in vain due to the time constraint and work pressure.

3) The recent trend of following social media influencers' diet and fitness regimes cannot be verifiable, due to the questionable legitimacy of the claims made presented by them.

4) The most common reason for people to fail in their diet routine is that they lose their confidence after planning different diet plans and failing to follow all of them.

SOLUTION

The aim of this project is to create a fitness tracker which can motivate users to track their diet and follow their diet without the eventual abatement. The classification of fruits is planned to be based on Convolutional Neural Network. Primarily, the model is trained using a training dataset of several fruits to be able to accurately measure the calories,sugar, fibre and proteins

present in a particular fruit. Furthermore, based on the image taken by the user, real time processing is done and uploaded to a custom-made website.

<u>ABSTRACT</u>

Managing Balanced diet in this modern world is a mirage. This project aids fitness enthusiasts to create a flexible and plausible diet schedule that does not stifle their interests eventually. This can be done using convolutional neural networks to train the model by providing it with a dataset consisting of various fruits. It will be extremely useful to classify the fruit pointed by the user to the custom made website describing the nutrients such as calories, sugar, fibre present. The data entered by the user is sent to the cloud. Furthermore, the data stored in the cloud returns all necessary statistics which helps the user to track the progress of his/her regimen, thereby motivating them to continue the diet.