PROJECT OBJECTIVES

Date	19 November 2022
Team ID	PNT2022TMID04240
Project Name	AI-Powered Nutrition Analyzer For Fitness Enthusiasts

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.

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.).

The platform provides nutrition-based data services, analytics, and technologies to its consumers and wants to turn itself into a leading source of nutrition-related insight platform. To enable individualised compilation of data, the platform uses NLP and mathematical models from the optimation theory and predictive analysis.

Technology used:

Python, CNN, IBM Cloud, IBM Watson, IBM Cloudant, DB, Deep Learning, Python flask.

Convolutional Neural Network:

A convolutional neural network, is a network architecture for deep learning which learns directly from data, eliminating the need for manual feature extraction. CNNs are particularly useful for finding patterns in images to recognize objects, faces, and scenes.

IBM Cloud:

IBM Cloud provides solutions that enable higher levels of compliance, security, and management, with proven architecture patterns and methods for rapid delivery for running mission-critical workloads.