AI-powered Nutrition Analyzer for Fitness Enthusiasts

ABSTRACT :

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.

PROJECT DESCRIPTION :

The main aim of the project is to building a model which is used for classifying the fruit depends on the different characteristics like color, 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, Fiber, Protein, Calories, etc.).

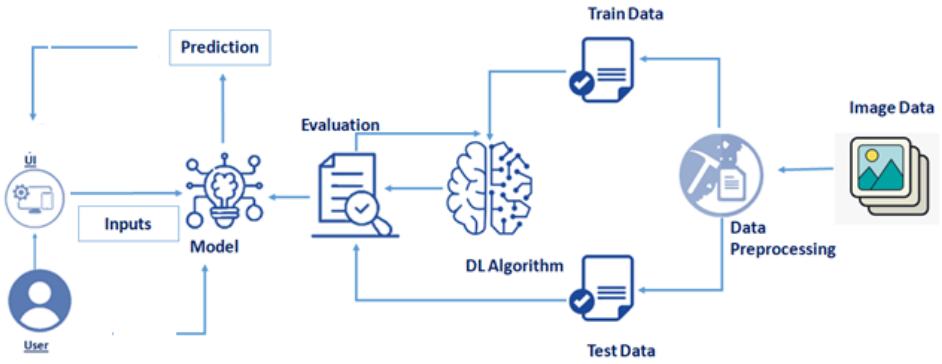
TECHNOLOGIES USED :

Python,CNN,IBM Cloud,IBM Watson,IBM Cloudant DB,Deep Learning,Python-Flask

PROJECT FLOW :

- The user interacts with the UI (User Interface) and give the image as input.
- Then the input image is then pass to our flask application,
- And finally with the help of the model which we build we will classify the result and showcase it on the UI.

PROJECT ARCHITECTURE :



RESULT AND DISCUSSION :

- This model will b useful for every category people irrespective of age and gender.
- Using this model we'll know the exact amount of nutritional content in the food we have which is very useful as it is very important to take care of one's health.
- It takes input as image and uses machine learning and deep learning algorithms to analyze the nutritional content in the food and calories in it.