Title : **AI-powered Nutrition Analyzer for Fitness Enthusiasts**

Domain name : ARTIFICIAL INTELLIGENCE

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Problem Statement:

Worldwide are using predictive analytics artificial intelligence and natural language processing to help scores of fitness enthusiasts to track and monitor their nutrition and calorie intake.AI and its various subset leveraged by these platforms to identify the calorie intake and alse to make food recommendations for a healthy diet.Platform uses NLP and mathematical models from the optimation theory and
predictive analysis.AI applications are Neutrino,FitGenie.

Proposed Solution:

1.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.

2.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.).

3. Worldwide are using predictive analytics artificial intelligence and natural language processing to help scores of fitness enthusiasts to track and monitor their nutrition and calorie intake.AI and its various subset leveraged by these platforms to identify the calorie intake and also to make food recommendations for a healthy diet.Platform uses NLP and mathematical models from the optimation theory and

predictive analysis.AI applications are Neutrino,FitGenie.

4.Nutrigenomics refers to the integration of genomic science with nutrition which is becoming increasingly popular in the field of nutrition-based AI. Specialized DNA tests focus on multiple aspects of an individual's microbiome such as genetics, environment, and lifestyle, yielding a personalized diet plan made from billions of data pieces about each individual. Such tests deliver nutritional guidance on the basis of the nutrigenomic whole system approach. Nutrigenomics can be leveraged to offer personalized interventions.

5.AI-Powered Nutrition Apps

Several companies are experimenting to explore machine learning's remarkable capabilities in relation to improving the existing applications. Plenty of nutrition apps are currently available

with variable accuracy. The most used AI-powered nutrition apps are as follows:

Neutrino

Fit Genie

Suggestic

Calorie Mama

Eat Right

6.As the world is growing more fitness-conscious with time, there is an increasing demand for advanced technological solutions to cater to it. Lately, many applications worldwide are using predictive analytics artificial intelligence as well as natural language processing to help scores of fitness enthusiasts to monitor their nutrition and calorie intake. Artificial Intelligence and its subsets have been leveraged by these platforms to identify the

calorie intake and then make food recommendations for a healthy diet.