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

Project Design Phase-I - Solution Fit Template

Team ID   :   PNT2022TMID30252

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Define CS, fit into CC

1. CUSTOMER SEGMENT(S)   `CS`

Our customers are one who are trying to live a healthy life and who want to analyze their health conditions by using the app which helps to recognize the food items and need the list of nutrition content present in it.
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6. CUSTOMER   `CC`

Accurate data
Data Network
Customer Satisfaction
Food or nutrition realated analyzer
</td><td>

5. AVAILABLE SOLUTIONS   `AS`

The available solution already present is the in-built items present which is been already given and present and stored by the other persons. For example, there is already the items and the quantity present in it and now as a different thing we are doing as the picture capture and making the image recognising one.

Explore AS, differentiate
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Focus on J&P, tap into BE, understand RC

2. JOBS-TO-BE-DONE / PROBLEMS   `J&P`

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.).
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9. PROBLEM ROOT CAUSE   `RC`

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.
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6. BEHAVIOUR   `BE`

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.

Focus on J&P, tap into BE, understand RC
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3. TRIGGERS TR

Some people are very fitness conscious and they become healthy without any diseases and that tempts the other people to make them also to be healthy and fit

4. EMOTIONS: BEFORE / AFTER

Emotions Before:

They don't have the fitness welness in them and then they don't live a healthy life and eat more junk foods.

Emotions After:

They analyze the food which they are eating and make healthy life.

EM

10. YOUR SOLUTION SL

Fruit classification is done by an algorithm based on convolution neural network has been applied for fruit detection. In this we use high-quality, fruit-containing image dataset for training a neural network to detect fruits. The efficiency of CNN can match human level perfection. Convolutional neural network algorithm in DNN which also performs efficiently for visual recognition including photo and video,face recognition, handwritten digit recognition. This model works efficiently with this architecture for fruit recognition.

8.CHANNELS OF BEHAVIOUR CH

- ➢ Model Building
- ➢ Import the model building Libraries
- ➢ Initializing the model
- ➢ Adding Input Layer
- ➢ Adding Hidden Layer
- ➢ Adding Output Layer
- ➢ Configure the Learning Process
- ➢ Training and testing the model
- ➢ Save the Model