Project Design Phase-I Proposed Solution Template

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| Date | 24 September 2022 |
| Project Name | AI-powered Nutrition Analyzer for  fitness Enthusiasts |
| Maximum Marks | 2 Marks |

Proposed Solution Template:

Project team shall fill the following information in proposed solution template.

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| **S. No.** | **Parameter** | **Description** |
| 1. | Problem Statement (Problem to be solved) | Nowadays, there are several health problems in society. Obesity is one of the main issues and has been increased for nearly three times as much as compared to the year 1975. In 2016, 39 % of the adults aged 18 years old and above were overweight, and 13 % of them were obese (WHO, 2018). It is associated with diseases like cardiovascular, hypertension and menstrual problems.  Over time, people have been more conscious about their diet and attempt to have calorie intake under control. People are better self-conscious in taking care of these issues and eat healthier food with a proper diet plan. Counting on calories is a common technique used to calculate energy obtained from food consumption. This helps people to lose, gain or maintain weight. In the past, people traditionally count calories by estimating the portion of their meals and check the calorie level in the calorie reference book. But this method is inaccurate since they need to look for different listings in the book. |
| 2. | Idea / Solution description | The idea of this application is that the user can capture the images of different fruits and vegetables, and then the image will be sent to the trained model. The model analyses the image and detects the nutrition based on the fruits like (Sugar, Fibre, Protein, Calorie intake, etc.). |
| 3. | Novelty / Uniqueness | The application has several unique features. The main feature is that the user need not have to visit or consult a  Nutritionist (or) a Dietician to follow a fit and healthy diet. This application has the feature of analysing the entire nutritional content of fruits and vegetables by simply scanning them.  The trained system can able to provide suggestions regarding the choice of food and calorie intake to be followed based on fitness goals stating that how much weight should gain / lose according to the current height and weight of an individual.  It provides for a personalized dietary requirement for individuals who have limited preferences while choosing food. |

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| 4. | Social Impact / Customer  Satisfaction | People can do weight managements, strengthen their bones and muscles, manage chronic health conditions & disabilities. |
| 5. | Business Model (Revenue  Model) | Social media is the best way to spread the word about our application and with the help of influencers we can attract normal people.  Clustering and targeting the fitness people with the help of local gyms.  The business model uses the idea of community (or) chat feature where fitness enthusiasts can interact on fitness plans and routines which gain attention of doctors, nutritionists, dieticians and several fitness trainers, mentors and influencers to use the platform. |
| 6. | Scalability of the Solution | It is a vital part of analytical chemistry that provides information about the chemical composition,  processing, quality control and contamination of food. |