**Project Design Phase-I**

**Proposed Solution Template**

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| Date | 10 October 2022 |
| Team ID | PNT2022TMID43392 |
| Project Name | AI-powered Nutrition Analyzer for Fitness Enthusiasts |
| Maximum Marks | 2 Marks |

**Proposed Solution Template:**

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| **S.No.** | **Parameter** | **Description** |
|  | Problem Statement (Problem to be solved) | The main aim of the project is to build a model which is used for identifying the fruit depends on the different characteristics like colour, shape, texture etc using image processing. Here the user can capture the images of different fruits and then the image will be analysed with the trained model. The model analyses the image and lists out the nutrients present in the fruit like sugar, vitamins, minerals, protein etc. |
|  | Idea / Solution description | To identify the given input data and to provide nutritional facts based on the obtained data. |
|  | Novelty / Uniqueness | The user can upload the images of different fruits, and the trained model analyses the image and detects the nutrition based on the fruits like (Sugar, Fibre, Protein, Calorie intake, etc.). CNN algorithm is used for Fruit Recognition using Colour and Texture Features and to classify the nutrition values. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
|  | Social Impact / Customer Satisfaction | Improvement in their nutritional values  Automatic fitness analyser and calorie management |
|  | Business Model (Revenue Model) | Advices from expert  Social media advertisement to attract people  Allowing third-party vendors (Nutritional Products) advertisements |
|  | Scalability of the Solution | Collecting more varieties of food data expands the application and improves the accuracy  Further nutritional values can be added to improve maternal, child nutrition and various health problems. |