# Project Design Phase-I
# Proposed Solution Template

| Date | 19 September 2022 |
|---|---|
| Team ID | PNT2022TMID42325 |
| 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.

| S .No | Parameter | Description |
|---|---|---|
| 1. | Problem Statement (Problem to be solved) | This project has been developed using Machine Learning algorithms. KMeans clustering was used to cluster the food according to calories and then Random Forest Classifier is used to classify the food items and predict the food items based on input given.<br>• Numpy was used to convert features into numpy and then perform the further operations.<br>• Tkinter was used to create interface. KMeans was used to perform clustering.<br>• Train_test_split was used to divide the dataset into train and test portions to train and test the model. |
| 2. | Idea / Solution description | Items that have been previously rated by the user before play a pertinent part in looking for neighbours that shares appreciation with him .When a neighbour of a person is found, various algorithms could be utilized combining the tasks of friends to produce recommendations |
| 3. | Novelty / Uniqueness | First, we need to identify the actual problem in order to get the right solution and it should be understood, the feasibility of the Deep Learning should also be checked (whether it should fit Deep Learning or not). Second, we need 9 to identify the relevant data which should correspond to the actual problem and should be prepared accordingly. Third, Choose the Deep Learning Algorithm appropriately. Fourth, Algorithm should be used while training the dataset. |