Ideation Phase
Define the Problem Statements

Date	19 September 2022
Team ID	PNT2022TMID42325
Project Name	Project – AI-Powered nutrition Analyser for fitness Enthusiasts
Maximum Marks	4 Marks

Customer Problem Statement Template:

This project has been developed using Machine Learning algorithms. K Means 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.
• Numpy was used to convert features into numpy and then perform the further operations.
• Tkinter was used to create interface. KMeans was used to perform clustering.
• Train_test_split was used to divide the dataset into train and test portions to train and test the model.
 • Random Forest Classifier used to predict the food items based on clustered data.

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. Fifth, Final testing should be done on the dataset.

I am	Describe customer with 3-4 key characteristics - who are they?	Describe the customer and their attributes here
I'm trying to	List their outcome or "job" the care about - what are they trying to achieve?	List the thing they are trying to achieve here
but	Describe what problems or barriers stand in the way – what bothers them most?	Describe the problems or barriers that get in the way here
because	Enter the "root cause" of why the problem or barrier exists – what needs to be solved?	Describe the reason the problems or barriers exist
which makes me feel	Describe the emotions from the customer's point of view – how does it impact them emotionally?	Describe the emotions the result from experiencing the problems or barriers

Example:

I am	I'm trying to	But	Because	Which makes me feel
a traveler	book flights on my phone	it takes a long time	The website is not responsive and doesn't have a mobile version	Frustrated

Problem Statement (PS)	Iam (Customer)	I'm trying to	But	Because	Which makes me feel
PS-1	FITNESS ENTHUSAIST	BE FIT AND MAINTAIN DIET	DEFICIENCY OF NUTRIENTS	NO PROPER GUIDENCE AND KNOWLEDGE	WEAK AND UNHEALTHY
PS-2	FIT PEOPLE	MAINTAIN PHYSIQUE	TAKEN UNEVEN CALORIE FOOD	UNAWARE OF FOODS NUTRITION FACTS	USELESS

PS-1	FITNESS ENTHUSAIST	BE FIT AND MAINTAIN DIET	DEFICIENCY OF NUTRIENTS	NO PROPER GUIDENCE AND	WEAK AND