

Project Design Phase-I Proposed Solution Template

Date	07 October 2022
Team ID	PNT2022TMID23530
Project Name	Nutrition Assistant Application
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 aims at building a web App that automatically estimates food attributes such as ingredients and nutritional value by classifying the input image of food. Our method employs Clarifai's AI-Driven Food Detection Model for accurate food identification and Food API's to give the nutritional value of the identified food.
2.	Idea / Solution description	Nutrition Assistant Application, is the project on the above problem statement. The solution flows in a manner where user interacts with the web app to load an image. The image is passed to the server application, which uses Clarifai's AI-Driven Food Detection Model Service to analyze the images and Nutrition API to provide nutritional information about the analyzed Image. Nutritional information of the analyzed image is returned to the app for display.
3.	Novelty / Uniqueness	The innovative approach has (i) Artificial intelligence based image recognition (ii) Developing an web application (iii) Using the cloud for storing nutrition details (iv) Using API (v) Spatial analysis
4.	Social Impact / Customer Satisfaction	(i) User interacts with the Web App to Load an image. (ii) The application model will be helpful for speed recognition of nutrition in food by image processing.
5.	Business Model (Revenue Model)	maintenance-as-a-service: This is an application where users can maintain their health according to the artificial intelligence guidance through IBM Watson. The application name is Nutrition Assistant Application. The name itself reflects, it will assist the nutrition levels from capturing images of food.
6.	Scalability of the Solution	Since most Nutrition assistant data are small files that lead to many small files, IBM cloud cannot be effective without a distributed system equipped with a high-performance computing system. To address this problem, IBM DB2 and SendGrid has been designed to process large (and small size) datasets. Using cloud computing technology in a Nutrition Assistant Application platform is another solution that can address scalability challenges related to capacity due to flexible and robust

		data collection, management, and processing capabilities.
--	--	-----------------------------------------------------------