Project Design Phase-I Proposed Solution Template

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| Date | 19 September 2022 |
| Team ID | B4-4M6E (Batch) |
| Project Name | Project - Nutrition Assistant Application |
| Maximum Marks | 2 Marks |

**Proposed Solution Template:**

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

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| **S.No.** | **Parameter** | **Description** |
| 1. | Problem Statement (Problem to be solved) | Due to the ignorance of healthy food habits, obesity rates are increasing at an alarming speed, and this is reflective of the risks to people’s health. People need to control their daily calorie intake by eating healthier foods, which is the most basic method to avoid obesity. However, although food packaging comes with nutrition (and calorie) labels, it’s still not very convenient for people to refer to App-based nutrient dashboard systems which can analyze real-time images of a meal and analyze it for nutritional content which can be very handy and improves the dietary habits, and therefore, helps in maintaining a healthy lifestyle. |
| 2. | Idea / Solution description | 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 |
| 3. | Novelty / Uniqueness | In this project, 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. |

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| 4. | Social Impact / Customer Satisfaction | Due to the ignorance of healthy food habits, obesity rates are increasing at an alarming speed, and this is reflective of the risks to people’s health. People need to control their daily calorie intake by eating healthier foods, which is the most basic method to avoid obesity. However, although food packaging comes with nutrition (and calorie) labels, it’s still not very convenient for people to refer to App-based nutrient dashboard systems which can analyze real-time images of a meal and analyze it for nutritional content which can be very handy and improves the dietary habits, and therefore, helps in maintaining a healthy lifestyle. |
| 5. | Business Model (Revenue Model) | A revenue model means understanding how a startup can make money. Our major revenue sources consist of ***sales, government funds, and public donations.*** The introduction of novel ideas increases revenue streams, such as special dietary needs, Clarifai's AI-Driven Food Detection Model, Food API's to give the nutritional value etc.. |
| 6. | Scalability of the Solution | Making use of cloud-native techniques is one way to automatically estimates food attributes such as ingredients and nutritional value by classifying the input image of food. IBM Cloud, for instance, is one of the cloud-based AI scalability options. Run and manage AI models, as well as optimise decisions at scale across any cloud, with the aid of IBM Cloud Build. The benefit of using the cloud to scale solutions is that we can install our AI programme there. the specific cloud environment that best supports our business needs. We can take advantage of built-in security capabilities and AI model monitoring.we can drive better business outcomes by optimizing our decisions and also make our solution scalable using cloud. |