

Project Design Phase-I
Proposed Solution Template

Date	11 October 2022
Team ID	PNT2022TMID14614
Project Name	Project - 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)	AI-powered Nutrition Analyzer for Fitness Enthusiasts
2.	Idea / Solution description	The main aim of the project is to build a model which is used for classifying the food which depends on the different characteristics like colour, shape, texture etc. Here the user can capture the images of different foods and then the image will be sent to the trained model. The model analyses the image and detects the nutrition content based on the food like (minerals,vitamins,iron,fibre, e.t.c..).
3.	Novelty / Uniqueness	Building the model,using the special algorithm: Mask Region based-Convolutional Neural Network(Mask R-CNN) ✓ This variant of a Deep Neural Network detects objects in an image and generates a high-quality segmentation mask for each instance.Also is a very quick process.
4.	Social Impact / Customer Satisfaction	➤ Helps to better understand and predict the complex and non-linear interactions between nutrition-related data and health outcomes, particularly when large amounts of data need to be structured and integrated, such as in metabolics. ➤ Diet, Fitness and profitability are carried out.
5.	Business Model (Revenue Model)	Yes,it is definitely a revenue model.

6.	Scalability of the Solution	<ul style="list-style-type: none"> ➤ Overall, nutrition and physical activity-related app show promise as tools to successfully facilitate positive health behavior change. ➤ Moreover, meal planning can be viewed as one technique to deliver nutrition knowledge in a more practical way. ➤ Personalization could be enabled in providing personalized feedback about healthy lifestyle, complying, at the same time, with established and ethical guidelines of different fields of nutrition research.
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