

**Project Design Phase**  
**Proposed Solution Template**

Date	26 June 2025
Team ID	LTVIP2025TMID59414
Project Name	Smart Sorting: Transfer learning for rotten fruits and vegetables
Maximum Marks	2 Marks

**Proposed Solution Template:**

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

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	In agricultural, food industries, and in super markets, ensuring the quality of fruits and vegetables is crucial for both customer's safety and economic lossage. For the quality assurance, designing an effective system that can accurately classify the rotten items and healthy items.
2.	Idea / Solution description	Developing and deploying a model to detect and classify the rotten and healthy fruits and vegetables. The model can be built by using Deep learning technologies like VGG16 Transfer learning model.
3.	Novelty / Uniqueness	Our proposed model can accurately detect whether the fruit or vegetable is healthy or rotten within fraction of seconds. So, there is no need of man power to classify the rotten and healthy fruits and vegetables.
4.	Social Impact / Customer Satisfaction	Customers can buy the good quality assured fruits and vegetables, as they were classified by our developed model in the markets
5.	Business Model (Revenue Model)	This model can be used for the business purposes in the supermarkets to classify the rotten and healthy fruits and vegetables
6.	Scalability of the Solution	The proposed solution is highly scalable, that processes multiple image uploads, maintains low latency and high accuracy as the workload and network traffic increases