**Project Design Phase**

**Proposed Solution Template**

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| Date | 29 June 2025 |
| Team ID | LTVIP2025TMID20850 |
| Project Name | Smart Sorting Transfer Learning for identifying rotten fruits and vegetables |
| 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** |
|  | Problem Statement (Problem to be solved) | Manual identification of rotten fruits and vegetables is time-consuming, error-prone, and inefficient, leading to food wastage and health risks. |
|  | Idea / Solution description | NutriGaze is an AI-powered system that classifies fruits and vegetables as healthy or rotten using transfer learning (MobileNetV2). Users upload an image to get instant predictions via a Flask web app. |
|  | Novelty / Uniqueness | Unlike generic classifiers, NutriGaze is specifically tailored for agricultural freshness detection and uses lightweight MobileNetV2 for fast performance on edge devices. |
|  | Social Impact / Customer Satisfaction | The solution can help farmers, vendors, and consumers reduce food waste, improve health safety, and save time through reliable, automated freshness detection. |
|  | Business Model (Revenue Model) | Freemium model: Free web access for consumers, subscription plans for retailers/farmers, and B2B integration via APIs for agriculture & logistics platforms. |
|  | Scalability of the Solution | Easily scalable to include more fruit/vegetable types, real-time camera integration, mobile apps, and IoT-based deployment in warehouses or cold chains. |