**Proposed Solution**

| Field | Details |
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| Date | 16-06-2025 |
| Team ID | LTVIP2025TMID35102 |
| Project Name | Smart Sorting: Detecting Rotten Fruits with Transfer Learning |
| Maximum Marks | 2 Marks |

| S. No. | Parameter | Description |
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| 1 | Problem Statement | Manual fruit sorting is inefficient, inconsistent, and leads to high food waste and delays in supply chains. |
| 2 | Idea / Solution Description | A transfer learning-based image classification system using a pretrained CNN model integrated into a Flask web app. It allows users to upload fruit images and get real-time predictions (fresh or rotten). |
| 3 | Novelty / Uniqueness | Uses pretrained models (e.g., VGG16), supports real-time web prediction, and offers an intuitive UI for non-technical users. Easily extensible to mobile or smart devices. |
| 4 | Social Impact / Customer Satisfaction | Minimizes wastage, improves food safety, boosts efficiency for farmers and sellers, and promotes tech adoption in agriculture. |
| 5 | Business Model | SaaS platform with tiered pricing based on usage. Add-ons include IoT camera integration, analytics dashboards, and API access. |
| 6 | Scalability of the Solution | Can classify various fruits or vegetables, supports multilingual UI, and scalable cloud deployment for broader adoption. |