

## Project Phase -2

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|---------------|--|
| Date          | 12 february 2026   |
| Team ID       | LTVIP2026TMIDS74869  |
| Project Name  | Transfer Learning for Identifying Rotten Fruits and Vegetables |
| Maximum Marks | 4 Marks  |

### Functional Requirements

| FR No. | Functional Requirement (Epic)      | Sub Requirement (Story / Sub-Task)  |
|--------|------------------------------------|---|
| FR-1   | Image Input & Validation           | Accept fruit/vegetable images (JPG/PNG) and validate format, size, and quality before processing. |
| FR-2   | Freshness Prediction               | Classify uploaded image as Healthy or Rotten using trained ML/CNN model.                          |
| FR-3   | Data Preprocessing                 | Resize images, normalize pixel values, and prepare data for model inference.                      |
| FR-4   | Model Inference                    | Load trained freshness detection model and return prediction with confidence score.               |
| FR-5   | Alert & Notification System        | Display warning message when rotten produce is detected.  |
| FR-6   | Dashboard & Reporting              | Show prediction results, summary statistics, and freshness trends.                                |
| FR-7   | Dataset & Model Management (Admin) | Upload/update image dataset and retrain model when needed.  |
| FR-8   | User Interface                     | Provide simple web interface for image upload and result visualization.                           |
| FR-9   | Model Performance Monitoring       | Display accuracy, precision, recall, and confusion matrix.  |
| FR-10  | System Logging                     | Log prediction results and user activity for monitoring and auditing.                             |