<h1 style="text-align:center">Project Design Phase-II
Solution Requirements (Functional & Non-functional)</h1>

Date	28 June 2025
Team ID	LTVIP2025TMID60885
Project Name	"Smart Sorting: Transfer Learning for Identifying Rotten Fruits and Vegetables"
Maximum Marks	4 Marks

Functional Requirements

Following are the functional requirements of the proposed solution.

FR No. Functional Requirement (Epic) Sub Requirement (Story / Sub-Task)

FR-1 User Registration - Registration through Form
 - Registration through Gmail
 - Registration through LinkedIn

FR-2 User Confirmation - Confirmation via Email
 - Confirmation via OTP

FR-3 Image Upload and Classification - Upload fruit/vegetable image
 - Run classification using trained model
 - Display classification results (Fresh/Rotten)

FR-4 Result History and Export - Save previous classification results
 - Allow result export (PDF/CSV)
 - Show image preview with classification

Non-functional Requirements

Following are the non-functional requirements of the proposed solution.

NFR No. Non-Functional Requirement Description

NFR-1 Usability User-friendly interface accessible on desktop and mobile

NFR-2 Security Secure user authentication, image data encryption, and access control

NFR-3 Reliability System maintains functionality under expected conditions and error recovery

NFR-4 Performance Image classification response time under 3 seconds

| NFR-5 | Availability | System available 24/7 with 99% uptime |
| NFR-6 | Scalability | Able to handle increasing number of users and image uploads efficiently |