

Project Design Phase-II

Solution Requirements (Functional & Non-functional)

Date	28 june 2025
Team ID	LTVIP2025TMID59918
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	Preprocessing of Images	The system must preprocess input images before feeding them to the model.
FR-2	Accuracy	Accuracy of predicting the fruits and vegetables freshness
FR-3	User Satisfaction	Satisfaction of user with the accuracy of prediction
FR-4	Batch Processing Support	For industrial use, the system should allow batch image classification

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Performance	In batch processing, it should be able to handle hundreds of images with minimal delay.
NFR-2	Scalability	The system should support scaling to multiple users or devices without degradation in performance.
NFR-3	Adaptability	The solution should allow for easy integration of new fruit/vegetable types or spoilage categories with minimal retraining.
NFR-4	Usability	The user interface should be simple, intuitive, and accessible for both technical and non-technical users.
NFR-5	Reliability	The model must produce consistent results with an accuracy of at least 90% or higher.