Project Design Phase-II
Solution Requirements (Functional & Non-functional)

Date	26 June 2025
Team ID	LTVIP2025TMID38828
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	Image Upload	Upload image of fruit or vegetable
FR-2	Classification	Predict healthy or rotten using trained model (VGG16)
FR-2	Classification	Display confidence score
FR-2	Classification	Show recommendation: "Good to Eat" or "Don't Eat"
FR-3	Feedback System	Feedback form after result display
FR-3	Feedback System	Save feedback as JSON for admin analysis
FR-4	Admin/Support Functions	Review feedback
FR-4	Admin/Support Functions	Trigger model retraining with new dataset
FR-4	Admin/Support Functions	Monitor model performance metrics

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	The web interface should be simple and intuitive for non-technical users.
NFR-2	Security	Uploaded images and feedback data should be securely stored.
NFR-3	Reliability	The system must consistently return correct predictions under expected loads.
NFR-4	Performance	Prediction response time should be under 2 seconds for most inputs.
NFR-5	Availability	The web application should maintain 99% uptime during demonstration or access.
NFR-6	Scalability	The system should support future integration with a mobile app or camera input.