

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

Date	26 June 2025
Team ID	LTVIP2025TMID20416
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 Facebook
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	Image Upload & Prediction	Upload image through UI Get classification result (Fresh / Rotten)
FR-4	Admin/Backend Operations	Preprocess uploaded image Run model using machine learning Return result to frontend
FR-5	Dashboard	View recent uploads and results Option to delete or reprocess images

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	Interface should be simple and intuitive for users to upload images and get results
NFR-2	Security	User data and uploaded images should be secured using authentication & HTTPS
NFR-3	Reliability	The model should consistently provide predictions under different load conditions
NFR-4	Performance	The model must return predictions in under 3 seconds for smooth user experience
NFR-5	Availability	The web app should be available 24/7 with minimal downtime
NFR-6	Scalability	The system should support more users and images as adoption increases