Project Design Phase-II
Data Flow Diagram & User Stories

Date	30 June 2025
Team ID	LTVIP2026TMID60885
Project Name	Smart sorting: Transfer learning for identifying rotten fruits and vegetables.
Maximum Marks	4 Marks

Data Flow Diagrams:

Data Flow Diagrams (DFD):

A Data Flow Diagram (DFD) provides a graphical representation of how data moves through the Smart Sorting system. It illustrates:

External Entities: Farmers, Suppliers, Admins

Processes: Image Upload, Preprocessing, Classification, Sorting, Report Generation

Data Stores: Image Database, Model Outputs, Classification Logs

Data Flows: Image input, Cleaned data, Prediction results, Feedback

Example:

Level 0 DFD

Input: Image of fruit/vegetable

Process 1: Image Preprocessing

Process 2: Classification via Transfer Learning Model

Output: Rotten / Fresh label

Data Stores: Image Repository, Results Log

User Stories

Use the below template to list all the user stories for the product.

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Farmer/supplier	Image upload and classification	USN-1	As a user, I can upload an image of fruits or vegetables for classification.	The image is processed and prediction (fresh/rotten) is displayed.	High	Sprint-1
		USN-2	As a user, I receive instant feedback after image upload.	System returns classification within a few seconds.	High	Sprint-1
		USN-3	As a user, I can view a history of all my image classification results.	Classification log is visible under user dashboard.	Medium	Sprint-2
	Registration/login	USN-4	As a user, I can view a history of all my image classification results.	I receive confirmation and can access the system.	High	Sprint-1
		USN-5	As a user, I can register using email and password.	I am authenticated and redirected to the dashboard.	High	Sprint-1