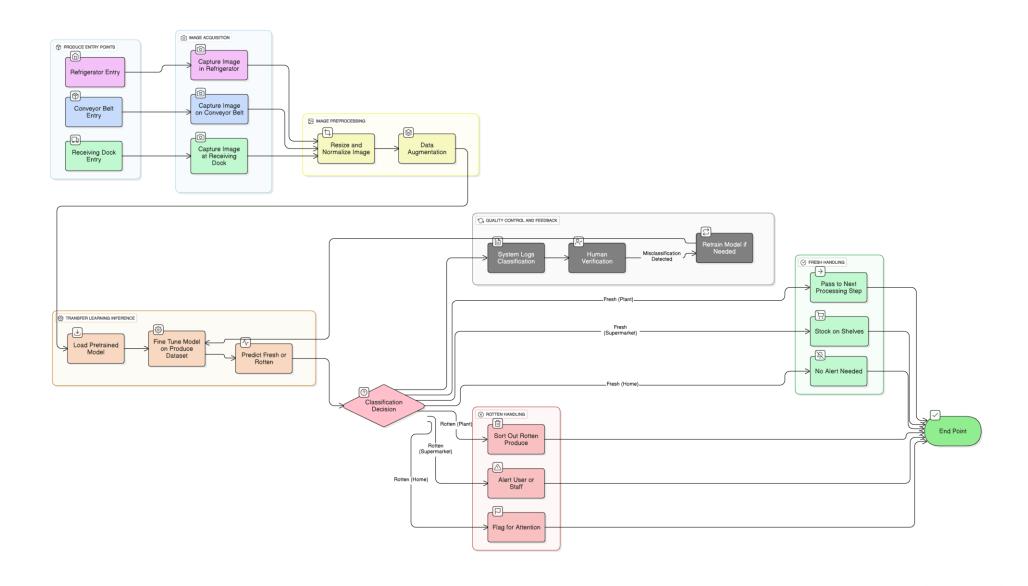
Project Design Phase-II Data Flow Diagram & User Stories

Date	25 th June 2025
Team ID	LTVIP2025TMID34982
Project Name	Smart Sorting using transfer learning
Maximum Marks	4 Marks

Data Flow Diagrams:

A Data Flow Diagram (DFD) is a traditional visual representation of the information flows within a system. A neat and clear DFD can depict the right amount of the system requirement graphically. It shows how data enters and leaves the system, what changes the information, and where data is stored.

Example: (Simplified)



User Stories

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

Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Web User (Customer) Upload Image for Prediction USN-1 USN-2 USN-3	USN-1	As a user, I can upload an image of a fruit or vegetable through the web browser	Image is successfully uploaded and displayed on screen	High	Sprint-1
	USN-2	As a user, I receive a prediction of the image as "healthy" or "rotten"	Prediction label appears instantly below the image	High	Sprint-1
	USN-3	As a user, I want the system to prevent invalid file types	If invalid file is uploaded, system shows error	Medium	Sprint-2
View Result	USN-4	As a user, I want to see a clean summary of the result (predicted class)	Clear label and confidence score is shown	Medium	Sprint-1
User Interface	USN-5	As a user, I want the app to be easy to use and mobile-friendly	App looks neat, buttons work, responsive design	High	Sprint-1
Upload from Different Devices	USN-6	As a user, I want to upload from mobile/laptop without compatibility issues	App works on mobile, tablet, and laptop browsers	Low	
Model Integration	USN-7	As an admin, I want to load the pre-trained model into the Flask server	Model is successfully loaded at app startup	High	
Dataset Visualization	USN-8	As an admin, I want to visualize class distribution and image samples	Output of matplotlib shows sample images and class count	Medium	
Monitor Predictions	USN-9	As an admin, I want to test system with various inputs for validation	Outputs are consistent for known test inputs	Medium	
Deploy App	USN-10	As an admin, I want to deploy app locally via Anaconda/Flask	App runs at localhost and predicts as expected	High	
	Requirement (Epic) Upload Image for Prediction View Result User Interface Upload from Different Devices Model Integration Dataset Visualization Monitor Predictions	Requirement (Epic) Upload Image for Prediction USN-2 USN-3 View Result USN-4 USN-5 Usn-5 Upload from Different Devices Model Integration Dataset Visualization Monitor Predictions Number USN-1	Requirement (Epic) Number Upload Image for Prediction USN-1 As a user, I can upload an image of a fruit or vegetable through the web browser USN-2 As a user, I receive a prediction of the image as "healthy" or "rotten" USN-3 As a user, I want the system to prevent invalid file types View Result USN-4 As a user, I want to see a clean summary of the result (predicted class) User Interface USN-5 As a user, I want the app to be easy to use and mobile-friendly Upload from Different Devices USN-6 As a user, I want to upload from mobile/laptop without compatibility issues Model Integration USN-7 As an admin, I want to load the pre-trained model into the Flask server Dataset Visualization USN-8 As an admin, I want to visualize class distribution and image samples Monitor Predictions USN-9 As an admin, I want to deploy app locally via	Requirement (Epic)	Requirement (Epic)