

**Project Design Phase-II**  
**Data Flow Diagram & User Stories**

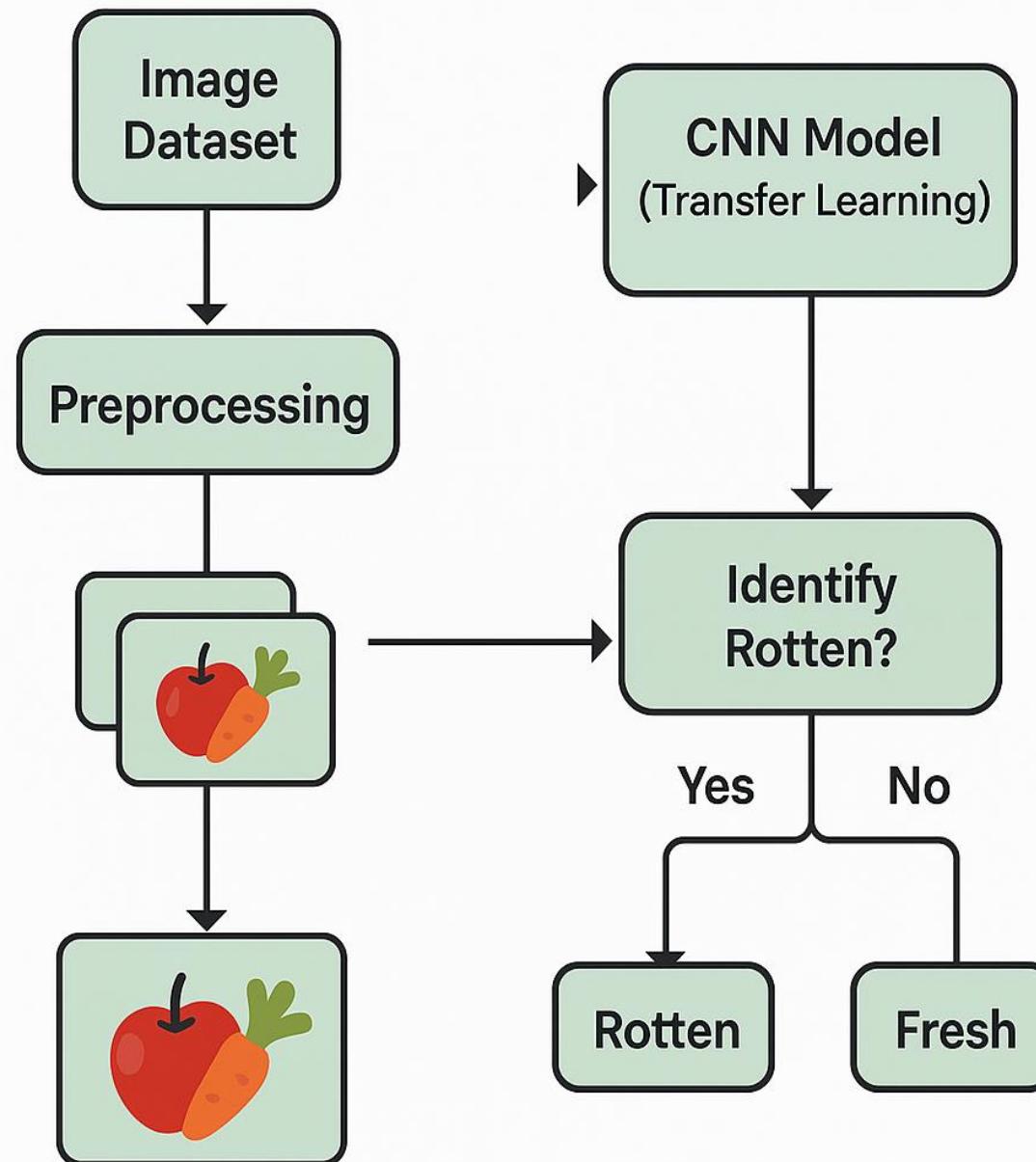
Date	8 February 2026
Team ID	LTVIP2026TMIDS75799
Project Name	Smart Sorting: Transfer Learning for Identifying Rotten Fruits and Vegetables
Maximum Marks	4 Marks

## **Data Flow Diagrams:**

Smart Sorting system using transfer learning to detect rotten produce. It outlines the key components—image input, preprocessing, feature extraction via a pre-trained CNN (like VGG16), classification, and actionable sorting decisions.

Let me know if you'd like the diagram to emphasize any particular aspect, such as integration with Flask or front-end feedback loops!

**Example: DFD Level 0 for smart sorting**



**Smart Sortina Transfer Learnina for**

**User stories:**

User Type	Epic	Story #	User Story	Acceptance Criteria	Priority	Release
Farmer/Vendor	Registration	SS-US-1	Register with email and password.	Can log in after registering.	High	Sprint-1
Farmer/Vendor	Image Upload	SS-US-2	Upload images of produce for analysis.	System accepts and confirms upload.	High	Sprint-2
Farmer/Vendor	Prediction	SS-US-3	View prediction of freshness or spoilage.	See label and confidence score.	High	Sprint-2
Farmer/Vendor	View History	SS-US-4	View history of uploaded images and results.	Records show date and outcome.	Medium	Sprint-3
Admin	Manage Users	SS-US-5	Manage registered users (view/edit/delete).	Admin panel lists users with action buttons.	Medium	Sprint-3
Admin	Model Feedback	SS-US-6	Review feedback and retrain the model as needed.	Can access feedback and start retraining.	High	Sprint-4