

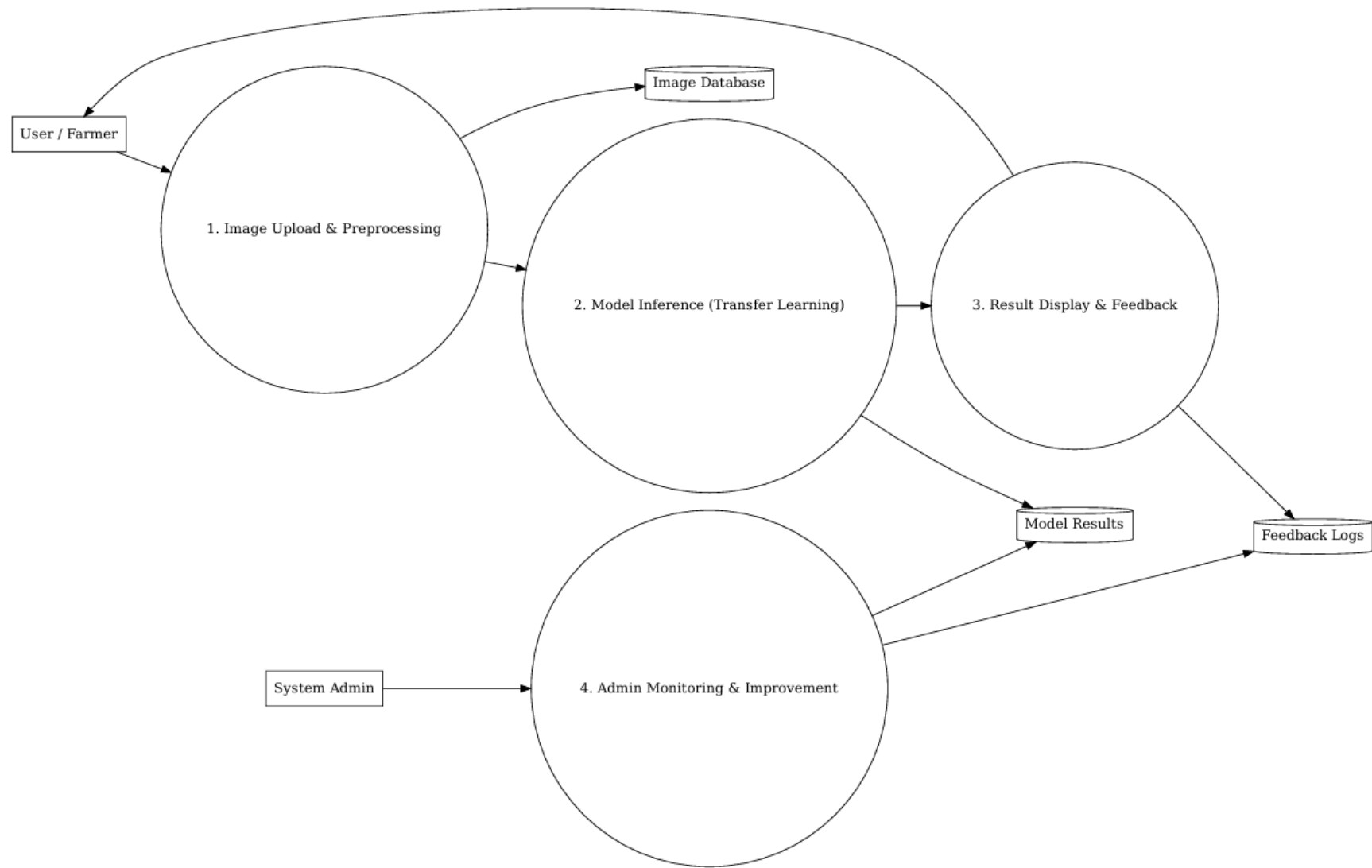
Project Design Phase-II
Data Flow Diagram & User Stories

Date	22 June 2025
Team ID	LTVIP2025TMID35377
Project Name	Smart Sorting: Identifying Rotten Fruits and Vegetables 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: DFD Level 0 for smart sorting



User Stories:

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance Criteria	Priority	Release
Farmer / Vendor	Registration	SS-US-1	As a user, I can register with my email and password to access the smart sorting system.	I can log in to the system after registering with valid credentials.	High	Sprint-1
Farmer / Vendor	Registration	SS-US-2	As a user, I receive a confirmation email after successful registration.	I receive an email with a confirmation link and can verify my account.	High	Sprint-1
Farmer / Vendor	Login	SS-US-3	As a user, I can log in with my registered email and password.	I can successfully log in and access the dashboard.	High	Sprint-1
Farmer / Vendor	Image Upload	SS-US-4	As a user, I can upload or capture images of fruits/vegetables for sorting.	The system accepts image input and confirms receipt.	High	Sprint-2
Farmer / Vendor	Prediction	SS-US-5	As a user, I can see whether the uploaded produce is “Fresh” or “Spoiled” based on AI detection.	The prediction is shown with a label and confidence score.	High	Sprint-2
Farmer / Vendor	Feedback	SS-US-6	As a user, I can give feedback if the prediction seems incorrect.	A form or button allows me to report incorrect prediction.	Medium	Sprint-3

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance Criteria	Priority	Release
Farmer / Vendor	View History	SS-US-7	As a user, I can view the history of my uploaded images and predictions.	I can see past records with timestamps and outcomes.	Medium	Sprint-3
Admin	Manage Users	SS-US-8	As an admin, I can view, edit, or delete registered users.	Admin panel displays user list with action buttons.	Medium	Sprint-2
Admin	Monitor Predictions	SS-US-9	As an admin, I can monitor AI prediction logs to ensure the system is performing accurately.	Admin sees dashboard with prediction counts, accuracy trends.	Medium	Sprint-3
Admin	Model Feedback Loop	SS-US-10	As an admin, I can review user feedback and retrain the model with new data.	Admin has access to feedback repository and retraining workflow.	High	Sprint-4
System	Transfer Learning Inference	SS-US-11	As a system, I apply a trained model to infer the condition of fruits/vegetables from uploaded images.	Model processes the input and returns result within acceptable time and accuracy.	High	Sprint-2