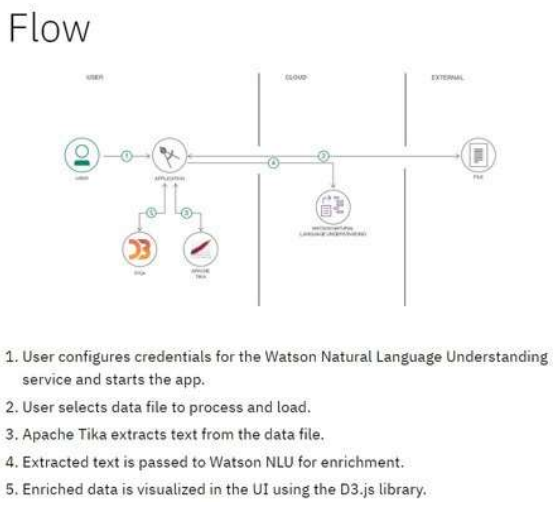
Project Design Phase-II
Data Flow Diagram & User Stories

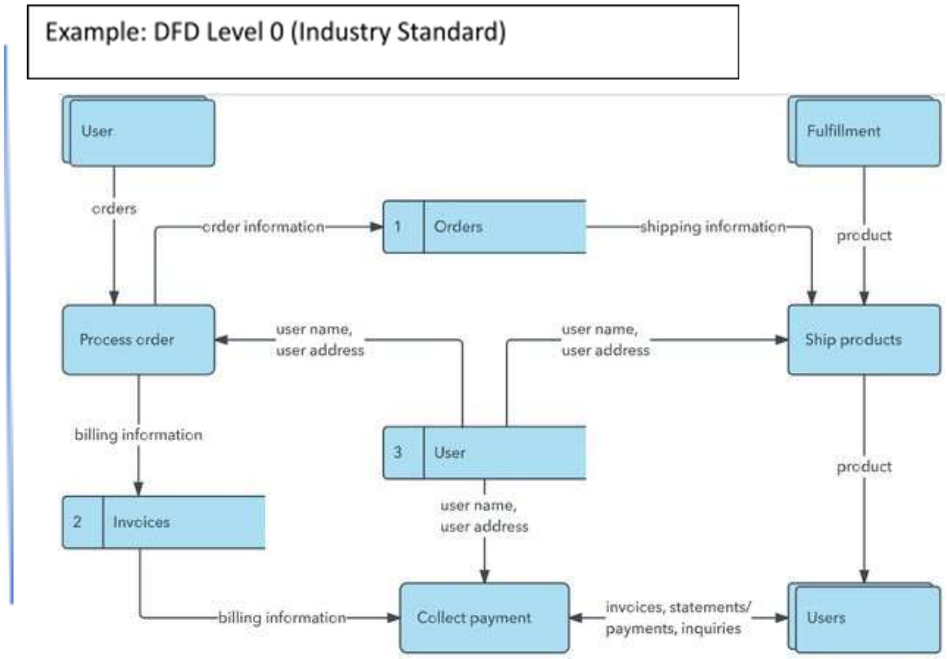
Date	16 June 2025
Team ID	LTVIP2025TMID43910
Project Name	GrainPalette A DeepLearning Odyssey In Rice Type Classification Through Transfer Learning
Maximum Marks	4 Marks

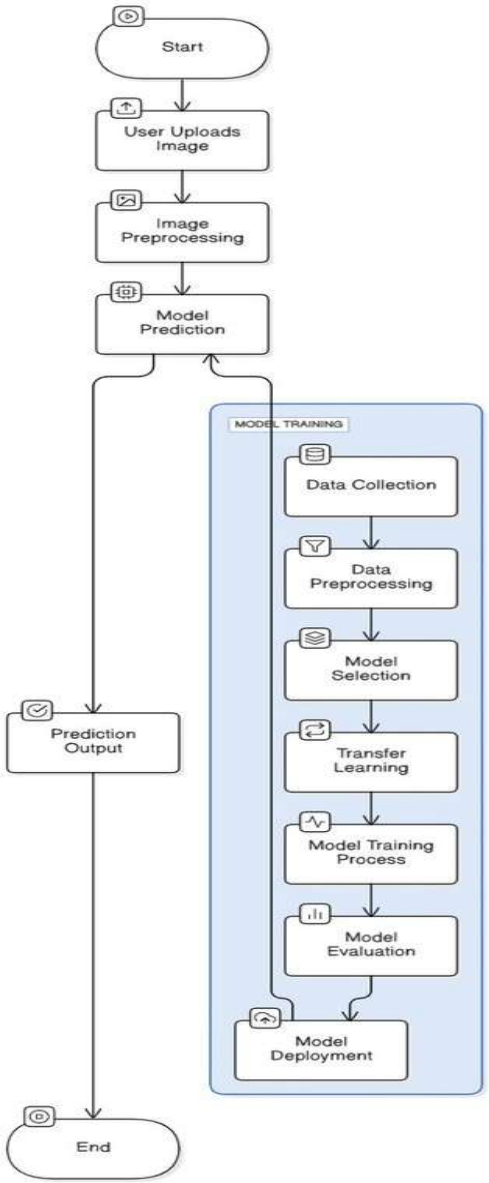
Data Flow Diagrams:

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)






Start
User Uploads Image
Image Preprocessing
Model Prediction
MODEL TRAINING
Data Collection
Data Preprocessing
Model Selection
Transfer Learning
Model Training Process
Model Evaluation
Model Deployment
Prediction Output
End

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
Customer (Mobile user)	Registration	USN-1	As a User, I can register using my phone number to avoid email dependency.	Receive OTP for verification; access dashboard after confirmation.	High	Sprint-1
	Image Upload	USN-2	As a User, I can upload a rice grain photo to identify its type.	App accepts JPG/PNG ≤5MB; displays "Upload Successful" message.	High	Sprint-1
	Result & Recommendations	USN-3	As a User, I want instant rice type predictions with farming tips.	Results load in ≤5 secs; tips include water/fertilizer needs in simple language.	High	Sprint-2
	Feedback	USN-4	As a User, I can report incorrect predictions to improve accuracy.	"Report Error" button appears with results; submission confirmation sent via SMS.	Medium	Sprint-3
Customer (Web User)	Dashboard	USN-5	As a User,, I can view my prediction history on a web dashboard.	Dashboard displays past uploads, dates, and recommendations in a table.	Medium	Sprint-2
	Bulk Upload	USN-6	As a User, I can upload multiple rice images at once for large-scale analysis.	System processes 10+ images in parallel;	Low	Sprint-3
Customer Care Executive	User Support	USN-7	As a support agent, I can access user-reported issues to resolve complaints.	Dashboard shows flagged predictions and user feedback with timestamps.	Medium	Sprint-3

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Administrator	Model Management	USN-8	As an admin, I can update the AI model to include new rice varieties.	New model deploys without downtime; accuracy metrics are logged.	High	Sprint-4
	Analytics	USN-9	As an admin, I can view system usage stats (e.g., daily uploads, common errors).	Dashboard displays graphs for user activity and prediction success rates.	Medium	Sprint-4