Project Design Phase-II
Data Flow Diagram & User Stories
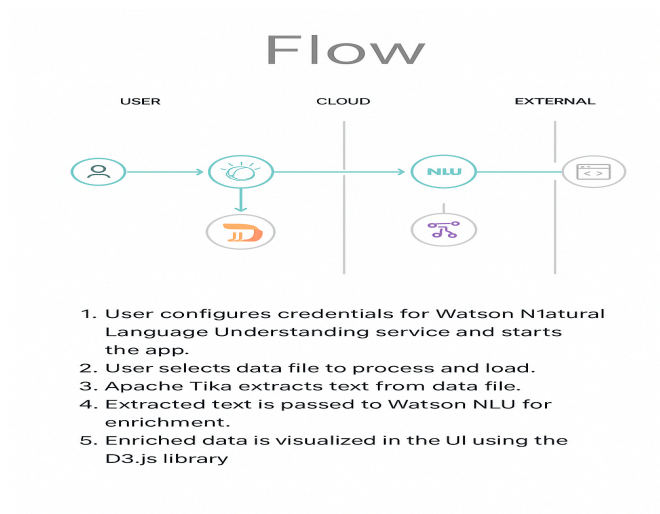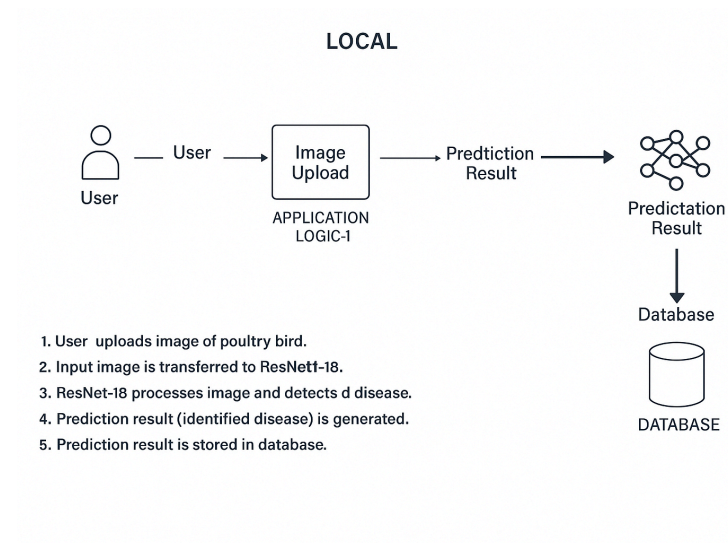
Date	26 June 2025
Team ID	LTVIP2025TMID44653
Project Name	Transfer Learning-Based Classification of Poultry Diseases for Enhanced Health Management
Maximum Marks	4 Marks

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 (Industry Standard)

Example: (Simplified)

LOCAL

1. User uploads image of poultry bird.
2. Input image is transferred to ResNet1-18.
3. ResNet-18 processes image and detects d disease.
4. Prediction result (identified disease) is generated.
5. Prediction result is stored in database.

Flow

1. User configures credentials for Watson N1atural Language Understanding service and starts the app.
2. User selects data file to process and load.
3. Apache Tika extracts text from data file.
4. Extracted text is passed to Watson NLU for enrichment.
5. Enriched data is visualized in the UI using the D3.js library

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 (Web user)	Image Upload	USN-1	As a user, I can upload a poultry image from my system	Image file (JPG/PNG) is accepted and previewed	High	Sprint-2
	Image Upload	USN-2	As a user, I receive an error if I upload an invalid file	Invalid file types are rejected with a message	Medium	Sprint-2
	Disease Detection	USN-3	As a user, I can get a prediction for uploaded image	Model output is shown with confidence score	HIgh	Sprint-2
	Prediction Result Display	USN-4	As a user, I can view the disease name and confidence level	Disease name and percentage is displayed	High	Sprint-2
	History Tracking (Optional)	USN-5	s a user, I can view my previous uploaded images and results	History is shown in tabular or card form	Low	Sprint-2
Administrator	Model Management	USN-6	As an admin, I can update the model or re-deploy it when a better version is ready	New model file can be uploaded into the system	Medium	Sprint-3
	Dataset Expansion (Optional)	USN-7	As an admin, I can add new images to retrain or improve the model	New image added to training dataset folder	Low	Sprint-3