Project Design Phase-II Data Flow Diagram & User Stories

Date	30 June 2025
Team ID	LTVIP2025TMID37158
Project Name	Transfer Learning-Based Classification of Poultry Diseases for Enhanced Health Management
Maximum Marks	4 Marks

Data Flow Diagrams:

External Entities:

- User: The person who captures or uploads poultry images.
- Trained Model: Pre-trained deep learning model (like VGG16/ResNet).

Processes:

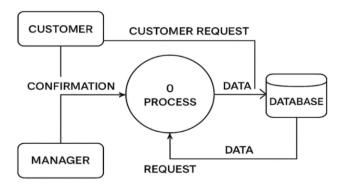
- 1. **Image Input –** Accept image input from user.
- 2. **Preprocessing –** Resize, normalize, and clean the image.
- 3. **Feature Extraction –** Extract deep features using a pretrained model.
- 4. Classification Identify disease class based on features.
- 5. **Result Display –** Output the predicted disease to the user.

Data Stores:

- Image Dataset Stores poultry disease images used for training/testing.
- Model Weights Stores the pre-trained weights and architecture.

Flow USER APRLICATION Newcastle 0. Fowl Pox Sabnonelia Healthy 1 3 Classification Preprocessing Layer User Predicted Disease APPLICALIO Featnse extraction RENSETT, VGG16

DATA FLOW DIAGRAM LEVEL 0



User Stories

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Farmer (Mobile/Web User)	Registration	USN-1	As a user, I can register by entering email, password, and confirming password.	I can access my account/dashboard after registration.	High	Sprint-1
Farmer	Login	USN-2	As a user, I can log in using my registered credentials.	I can enter app and view upload option.	High	Sprint-1
Farmer	Image Upload	USN-3	As a user, I can upload an image of a chicken.	The image is uploaded and processed.	High	Sprint-1
Farmer	Disease Detection	USN-4	As a user, I can get the disease name after image upload.	Model gives result (Healthy / Disease name).	High	Sprint-1
Farmer	Disease Information	USN-5	As a user, I can see brief info/tips about the detected disease.	Info page opens with details.	Medium	Sprint-2

Admin	View Uploaded Images	USN-6	As an admin, I can view all uploaded images and prediction logs.	Admin panel shows image history and predictions.	Medium	Sprint-2
Admin	Manage Users	USN-7	As an admin, I can block or remove fake/invalid users.	Admin dashboard allows user control.	Low	Sprint-2