

Project Design Phase-II Data Flow Diagram & User Stories

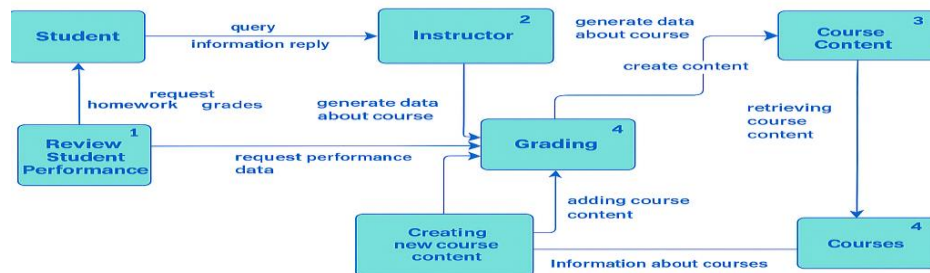
Date	19 June 2025
Team ID	LTVIP2025TMID34708
Project Name	Transfer Learning-Based Classification of Poultry Diseases for Enhanced Health Management
Maximum Marks	4 Marks

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: [\(Simplified\)](#)

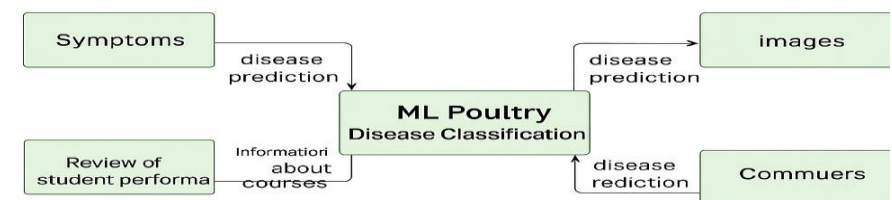
Example: [\(Simplified\)](#)



Example: DFD Level 0 (Industry Standard)

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Example: DFD Level 0



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
Data Engineer	Data Ingestion	USN-1	As a developer, I want to collect historical poultry data from sensors and APIs	Data collected from all defined sources and stored in raw form	High	Sprint-1
Data Engineer	Data Preprocessing	USN-2	As a developer, I want to preprocess data to handle missing values and normalize formats	Clean, normalized dataset ready for modeling	High	Sprint-1
ML Engineer	Model Development	USN-3	As a data scientist, I want to build a machine learning model to predict poultry volumes	Model trained with >80% accuracy on validation set	High	Sprint-2
ML Engineer	Model Evaluation	USN-4	As a data scientist, I want to validate and test model accuracy using test datasets	Model achieves acceptable MAE/RMSE	Medium	Sprint-2
DevOps	API Deployment	USN-5	As a developer, I want to deploy the model as an API for real-time predictions	API endpoint accessible with response time <2s	High	Sprint-3
Admin	Real-Time Dashboard	USN-6	As an admin, I want to visualize real-time poultry predictions via a dashboard	Dashboard displays predictions updating live	High	Sprint-3
City Planner	Urban Insights	USN-7	As a city planner, I want to view poultry heatmaps for planning	Downloadable heatmaps by region and time	Medium	Sprint-4
Commuter	Route Suggestions	USN-8	As a commuter, I want suggested optimal routes based on live poultry	Routes adjust dynamically based on predictions	Medium	Sprint-4
Third-party App	API Integration	USN-9	As a developer, I want to integrate poultry prediction API into external apps	API returns accurate results with secure access	High	Sprint-4