

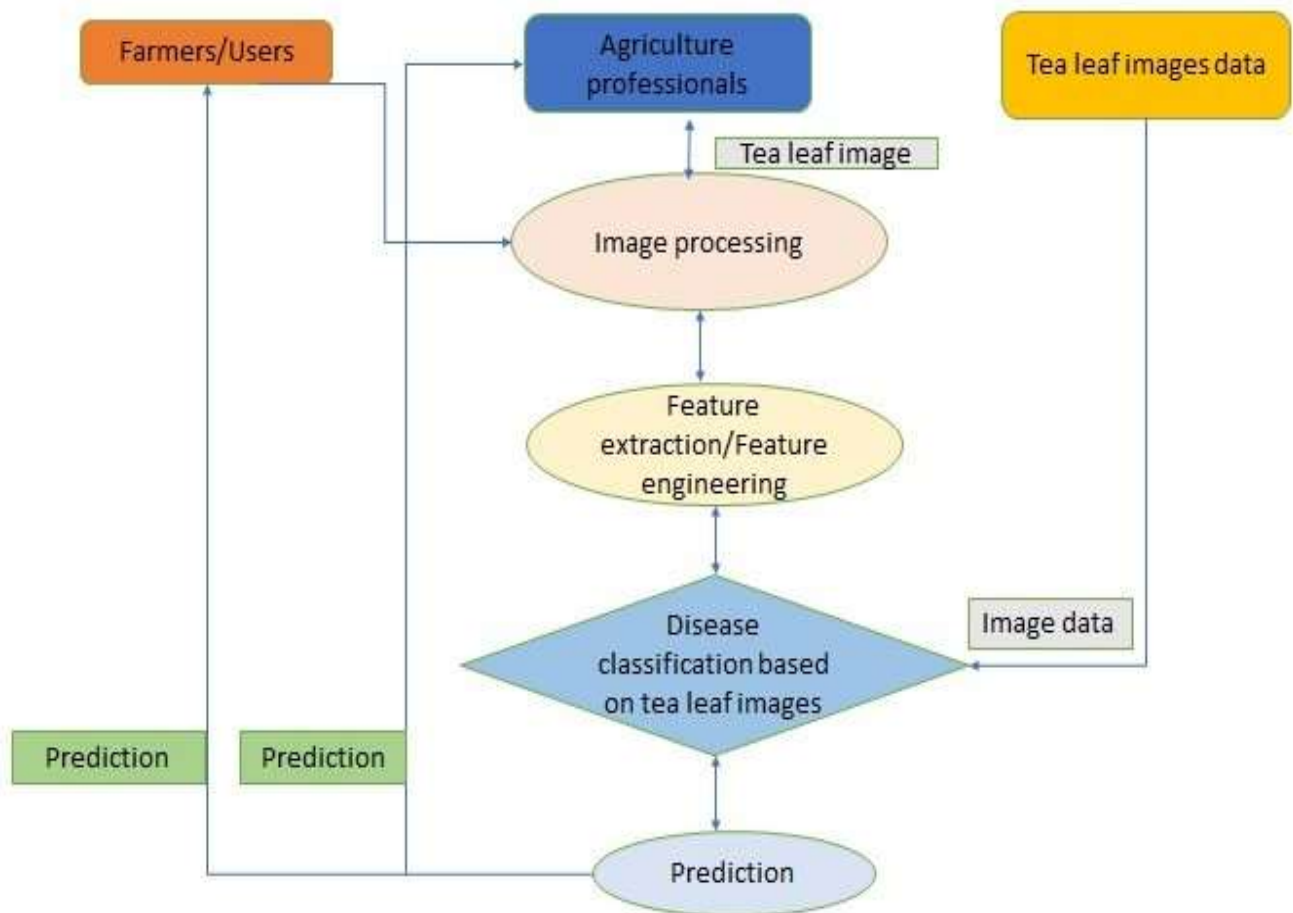
Project Design Phase-II

Data Flow Diagram & User Stories

Date	8 November 2023
Team ID	Team-592127
Project Name	Deep Learning Model For Detecting Diseases In Tea Leaves
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.



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
Farmers (Web User)	Data Collection	USN-1	As farmer, I want to collect and provide a diverse dataset of tea leaves to train the disease detection model.	The system should allow users to upload and manage a dataset with labeled images of healthy and diseased tea leaves.	High	Sprint -1
Farmers (Web User)	Model Training	USN-2	As a farmer, I want to train the deep learning model using the uploaded dataset for disease detection.	The system should initiate model training using the provided dataset and provide feedback on the training progress and accuracy.	High	Sprint -1
Farmers (Web User)	Model Evaluation	USN-3	As a farmer, I want to evaluate the trained model's performance on new tea leaf images for disease detection.	The system should allow users to input new tea leaf images, and the model should provide accurate predictions with corresponding confidence scores.	High	Sprint -1
Farmers (Web User)	Results Visualization	USN-4	As farmer, I want a visual representation of the disease detection results to facilitate decision-making.	The system should display the model's predictions, highlighting areas of concern on the tea leaf images, and provide a confidence score for each prediction.	Medium	Sprint -2

System Administrators	Model Maintenance	USN-5	As a system administrator, I want tools to monitor and maintain the health of the deep learning model over time.	The system should provide logs, alerts, and tools for retraining the model periodically to ensure its effectiveness in detecting diseases in tea leaves.	Medium	Sprint -2
Farmers (Web User)	Real-time Prediction	USN-6	As a farmer, I want the ability to get real-time predictions for disease detection on live camera feed.	The system should support real-time prediction using a camera feed, providing instant feedback on the health status of tea leaves.	Medium	Sprint -1
Farmers (Web User)	Mobile Accessibility	USN-7	As an agricultural researcher/farmer, I want to access the disease detection model on my mobile device for on-the-go monitoring.	The system should be accessible and user-friendly on mobile devices, allowing users to check disease predictions and results anytime, anywhere.	Medium	Sprint -2
Data Scientists	Model Customization	USN-8	As a data scientist, I want the ability to customize and fine-tune the deep learning model parameters for optimal performance.	The system should provide options for data scientists to adjust hyperparameters, model architecture, and training settings to enhance model accuracy.	High	Sprint -3