

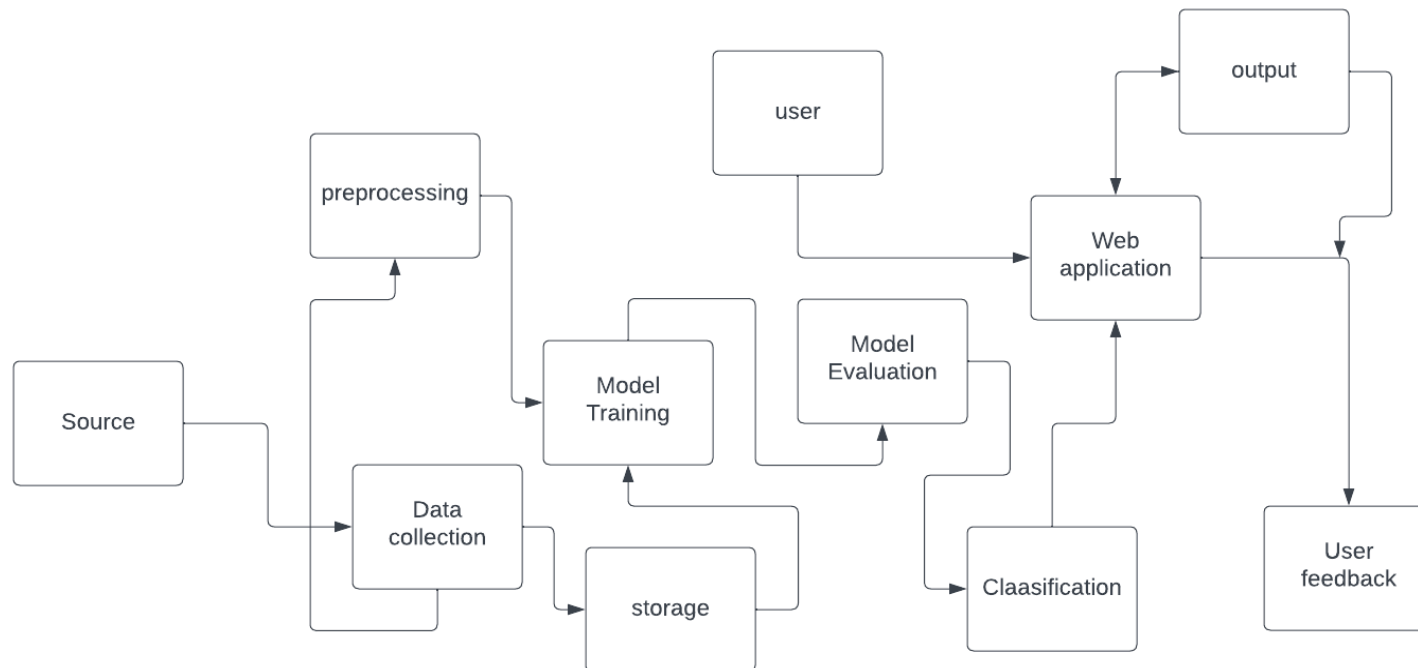
## Project Design Phase-II

### Data Flow Diagram & User Stories

Date	16-11-2023
Team ID	PNT2023TMID592248
Project Name	Potato Disease Classification
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

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
crop companies	Project setup & Infrastructure	USN-1	To set up a potato disease classification system Seed and Soil Treatment, Selection of Healthy Seed Tubers.	successfully configured with all necessary tools and frameworks	High	Sprint 1
Municipalities and Local Governments	development environment	USN-2	Gather a diverse dataset of images containing different types of potato leaves for training the deep learning model.	Gathered a diverse dataset of images depicting various types of potato diseases	High	Sprint 1
Farmers	Data collection	USN-3	the use of technology for potato disease classification has been positive, as it enables them to identify diseases at very early stages and take necessary actions to improve crop yield.	preprocessed the dataset	High	Sprint 2
Researchers and Academics	data preprocessing	USN-4	Explore and evaluate different deep learning architectures (e.g., CNNs) to select the most suitable model for potato disease classification.	we could explore various DL models	High	Sprint 2
Non-Governmental Organizations (NGOs)	model development	USN-5	train the selected deep learning model using the preprocessed dataset and monitor its performance on the validation set.	we could do validation	High	Sprint 3
Educational Institutions	Training	USN-6	Incorporate data augmentation methods, such as rotation and flipping, to enhance the model's resilience and boost its accuracy.	we could do testing	medium	Sprint 3
	model deployment & Integration	USN-7	deploy the trained deep learning model as an API or web service to make it accessible for garbage classification. integrate the model's API into a user-friendly web interface for users to upload images and receive garbage classification results.	we could check the scalability	medium	Sprint 4
	Testing & quality assurance	USN-8	conduct thorough testing of the model and web interface to identify and report any issues or bugs. fine-tune the model hyperparameters and optimize its performance based on user feedback and testing results.	we could create web application	medium	Sprint 5

