Project Design Phase-II

Data Flow Diagram
&
User Stories

| Date	23-10-2023
Team ID	**Team-591814**
Project Name	**DETECTING COVID-19 FROM CHEST X-RAY USING DEEP LEARNING TECHNIQUES**
Maximum Marks	4 Marks

Data Flow Diagram:

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.

A data flow diagram may be used to visualize data processing as well (structured design). A designer's standard procedure is to create a context level DFD first, which depicts the system's relationship with external elements. DFDs depict the flow of information entering the system from external sources, and how the information travels from one operation to the next and its logical preservation. Merely four symbols have been used.

DATA FLOW DIAGRAM

Level 0 Data Flow Diagram:
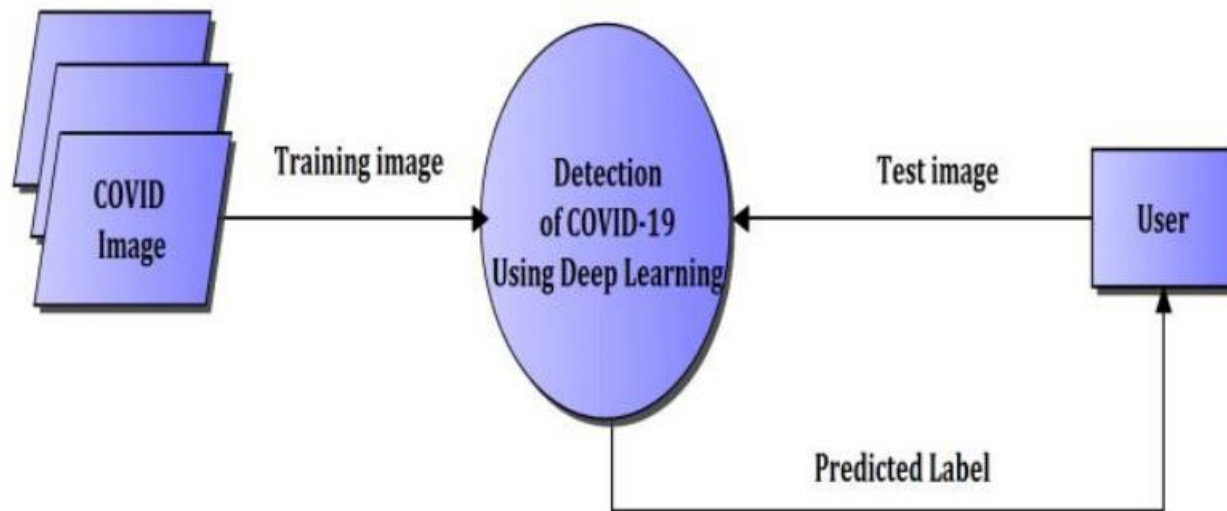
Level 1 Data Flow Diagram:
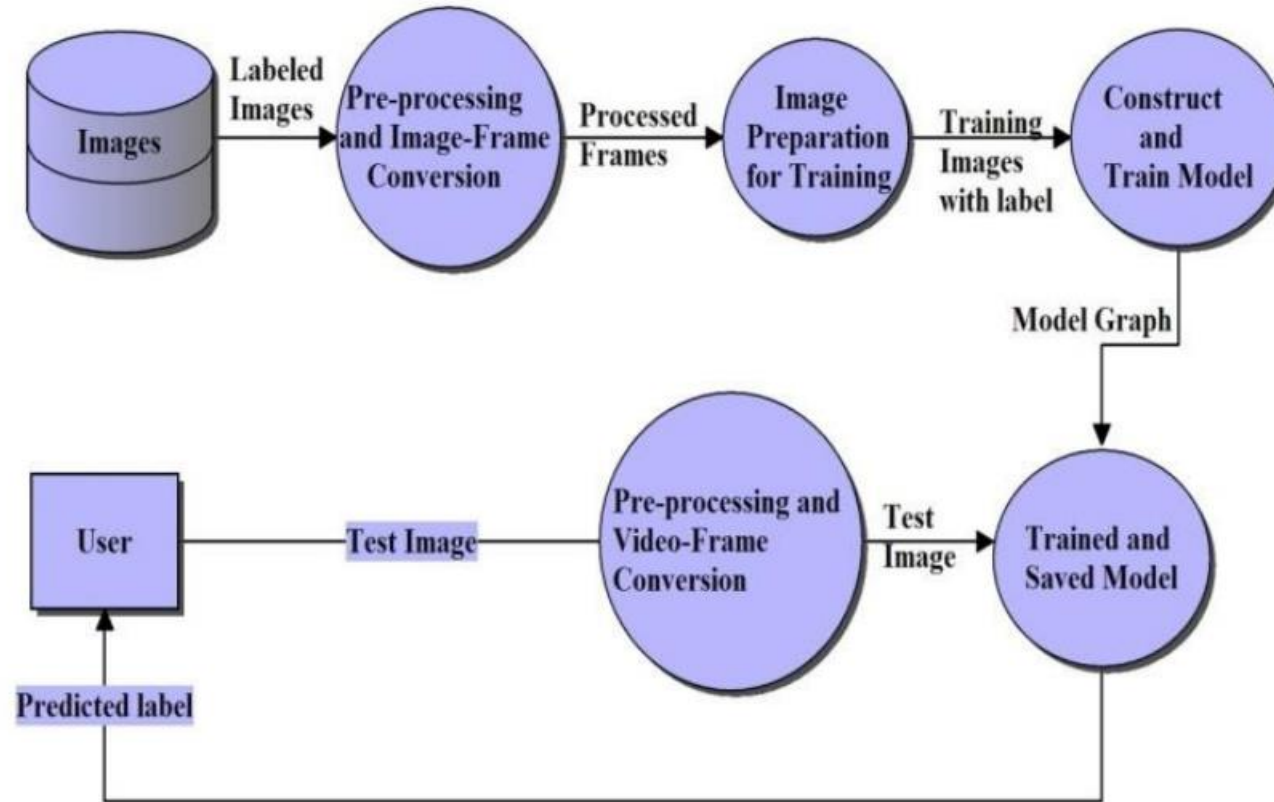
User Stories

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Healthcare Professionals	Project setup	USN-1	As a healthcare professional, I want to upload patient data and test results to the system so that it can analyse the likelihood of COVID-19 infection accurately and provide recommendations for further action.	The system should allow healthcare professionals to securely upload patient data and test results	High	Sprint 1
Researchers	Research facility	USN-2	As a researcher, I want to access a diverse and extensive dataset of COVID-19 cases globally to train the machine learning model effectively and improve its predictive accuracy.	The system should allow access to a comprehensive up-to-date dataset of COVID-19 cases from various sources	High	Sprint 1
Patients and individuals	User Interface	USN-3	As a patient, I want to input my symptoms into the system to receive an assessment of my risk of being affected by COVID-19, which will help me determine whether I should seek immediate medical attention or take precautionary measures.	The system interface should allow users to input symptoms easily and provide a straight-forward assessment of the risk of COVID-19 infection	High	Sprint 2
Medical administrators	Data classification	USN-4	As a healthcare administrator, I want to monitor the performance and accuracy of the COVID-19 detection model to ensure that it aligns with latest medical guidelines and reliable results for effective decision making.	The system should generate regular reports on the performance and accuracy of the COVID-19 detection model	High	Sprint 2
Data scientists	Model training	USN-5	As a data scientist, I want to access model's training data and performance metrics to fine-tune the algorithm and improve its sensitivity and specificity in identifying COVID-19 cases, especially in different demographic groups.	The system should provide access to training data, model architecture and performance metrics for the data scientists	High	Sprint 3