Project Design Phase-II
Data Flow Diagram & User Stories
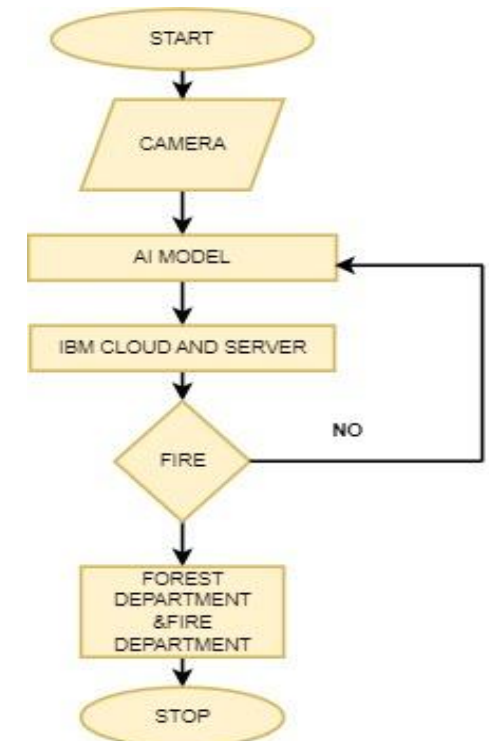
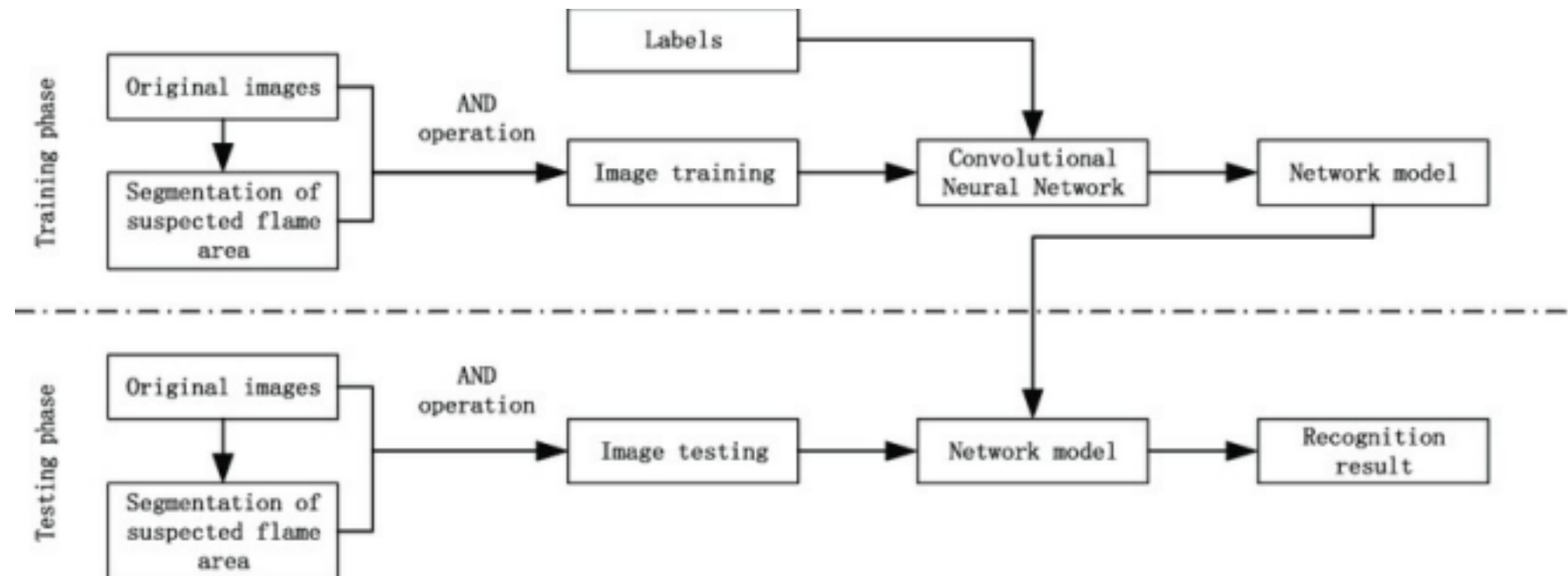| Date	9 NOVEMBER,2022
Team ID	PNT2022TMID04190
Project Name	Emerging Methods for Early Detection of Forest Fires
Maximum Marks	4 Marks

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:

It is difficult to predict and detect Forest Fire in a sparsely populated forest area.

It is more difficult if the prediction is done using ground-based methods like Camera

or Video-Based approach.Satellites can be an important source of data prior to and

also during the Fire due to its reliability and efficiency.The various real-time forest

fire detection and prediction approaches, with the goal of informing the local fire authorities.

If the fire is not detected ,it will send the result to the frame camera.if the forest fire

will detected the alert will go to the video feed frame camera.

DFD:

Training phase

Original images → Segmentation of suspected flame area

AND operation

Labels

Image training → Convolutional Neural Network → Network model

Testing phase

Original images → Segmentation of suspected flame area

AND operation

Image testing → Network model → Recognition result

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
Environmental list	Collect the data	USN-1	As an Environmentalist.it is necessary to collect the data of the forest which includes temperature,humidity,wind and rain of the forest	It is necessary to collect the right data else the prediction may become wrong.	High	Sprint-1
		USN-2	Identify algorithms that can be used for prediction	To collect the algorithm to identify the accuracy level of each algorithms	Medium	Sprint-2
	Implement Algorithm	USN-3	Identify the accuracy of each algorithms	Accuracy of each algorithm-calculated so that it is easy to obtain the most accurate output	High	Sprint-2

		USN-4	Evaluate the Dataset	Data is evaluated before processing	Medium	Sprint-1
	Evaluate Accuracy of Algorithm	USN-5	Identify accuracy,precision,recall of each algorithms	These values are important for obtaining the right output	High	Sprint-3