

## Project Design Phase-II

### Data Flow Diagram & User Stories

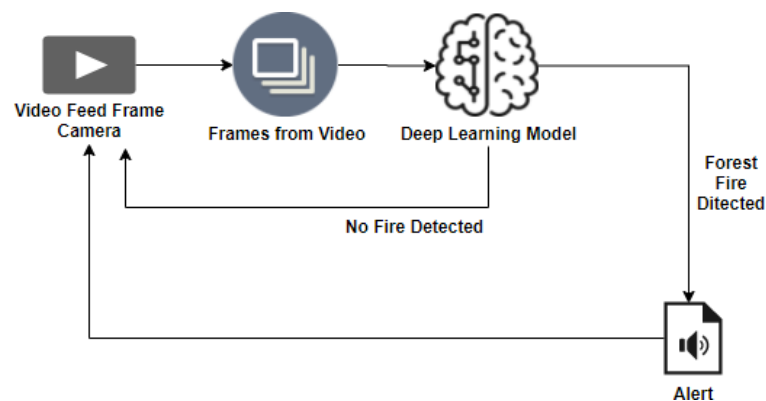
|               |  |
|---------------|--|
| Date          | 16 October 2022                                      |
| Team ID       | PNT2022TMID09968                                     |
| Project Name  | Emerging Methods for Early Detection of Forest Fires |
| Maximum Marks | 4 Marks  |

#### 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.

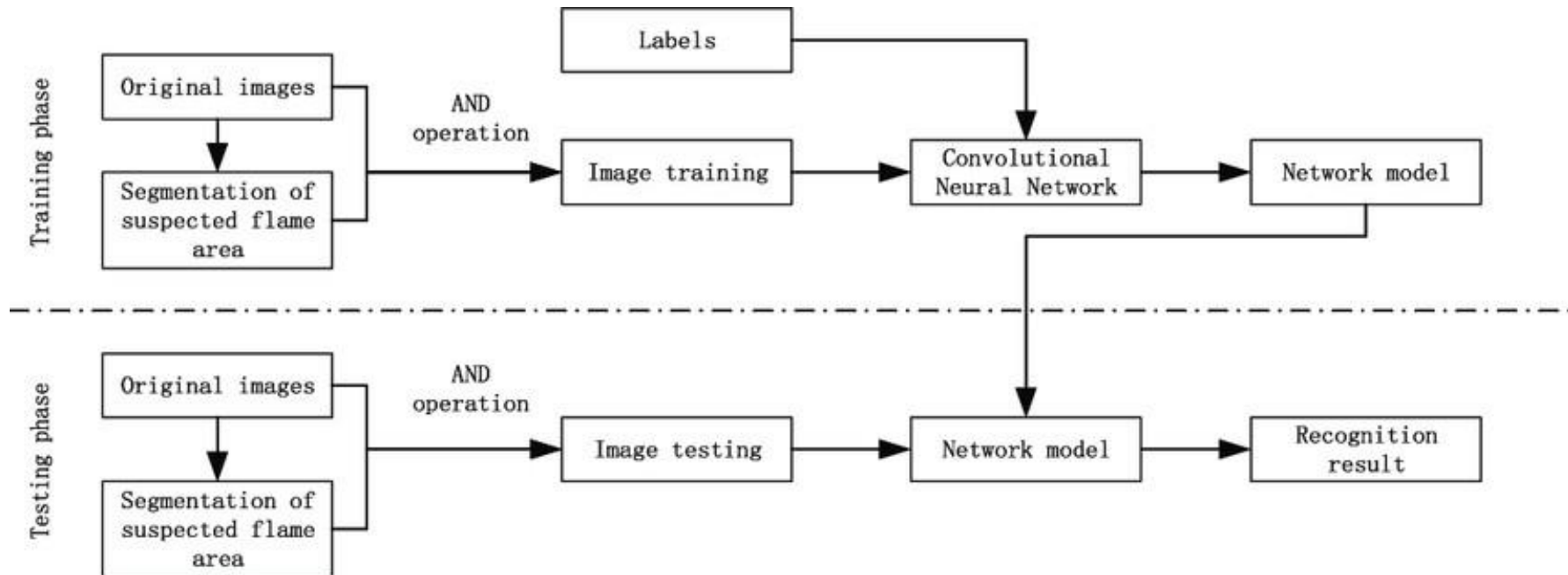
#### Example:

##### FLOW



1. It is difficult to predict and detect Forest Fire in a sparsely populated forest area.
2. it is more difficult if the prediction is done using ground-based methods like Camera or Video-Based approach.
3. Satellites can be an important source of data prior to and also during the Fire due to its reliability and efficiency.
4. The various real-time forest fire detection and prediction approaches, with the goal of informing the local fire authorities.
5. 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:



### 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 I Task  | Acceptance criteria   | Priority | Release  |
|-------------------|--------------------------------|-------------------|--|---|----------|----------|
| Environmenta 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 |
|                   | Display Results                | USN-6             | Outputs from each algorithm are obtained   | It is highly used to predict the effect and to take precautionary measures.                 | High     | Sprint-4 |

