Project Design Phase-II
Data Flow Diagram & User Stories
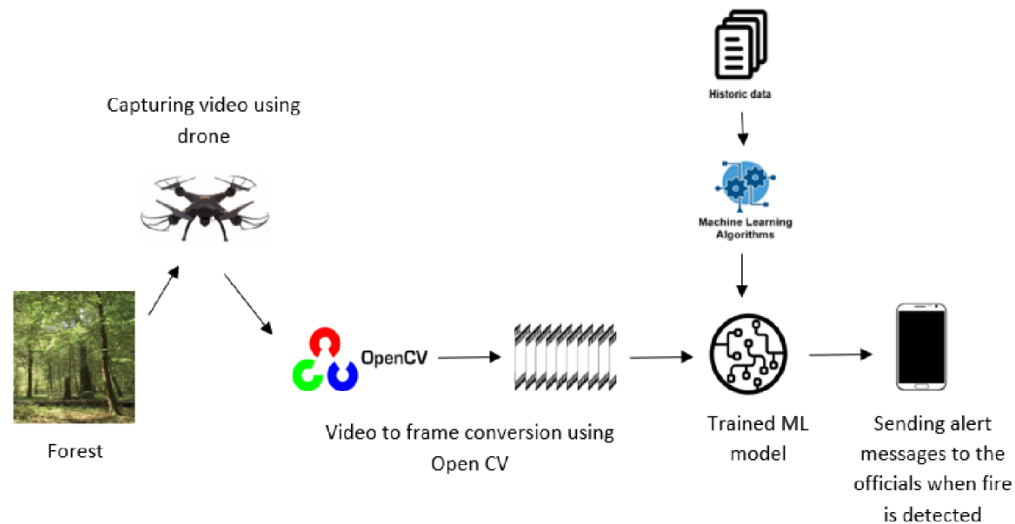
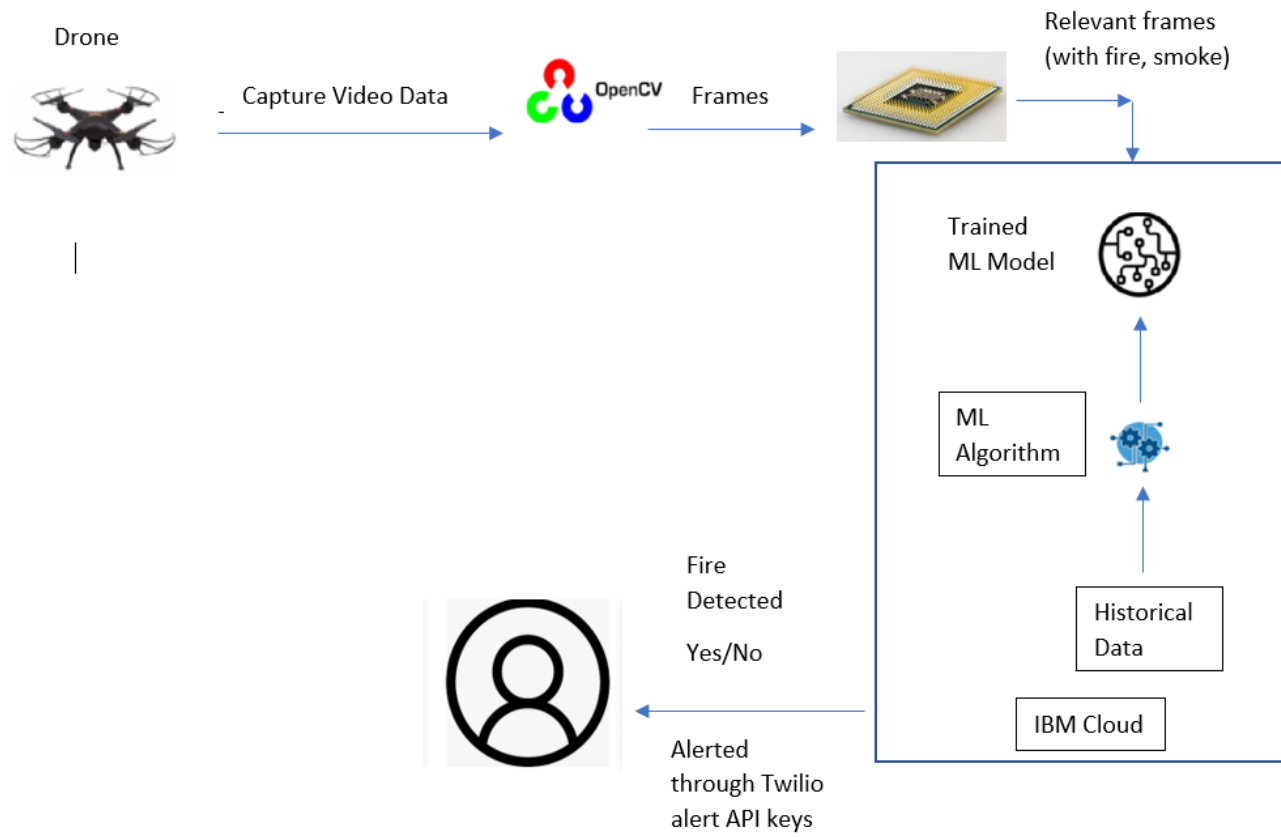| Date	03 October 2022
Team ID	PNT2022TMID52907
Project Name	Emerging Methods for Early Detection of Forest Fires
Maximum Marks	4 Marks

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

DATA FLOW DIAGRAM:

Drone

Capture Video Data

OpenCV

Frames

Relevant frames
(with fire, smoke)

Trained
ML Model

ML
Algorithm

Fire
Detected

Yes/No

Historical
Data

IBM Cloud

Alerted
through Twilio
alert API keys

User Stories:

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
People living in and around the forests and Tribals	Alerts	USN-1	As a user, they require immediate alerts in case of forest fires so that they can leave the place immediately	Proper and timely alerts are essential	High	Sprint-1
	Assistance	USN-1	As a user, external assistance is required so that their safety is ensured.	Timely assistance is needed so that evacuation can be done.	High	Sprint-1
	Early Detection	USN-1	As an user Early Detection, will ensure safety relocation.	Along with the detection they should get alerted. They should also get assistance.	high	Sprint-1
Hikers/Tourists	Alerts	USN-1	As a user, they should get alerted when there is likely a fire.	I can register & access the dashboard with Facebook Login	Low	Sprint-2
	Assistance	USN-1	As a user, external assistance is required so that their safety is ensured.	Timely assistance is needed so that evacuation can be done.	High	Sprint-2

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Environmentalists	Means for data collection	USN-1	As a user, they can use this data for analyzing purposes.	Access to data is needed, so that proper use can be made out of it.	Low	Sprint-1
Forest Officials	Early Detection	USN-1	As a user they can get the forest area under suspicion covered up and prevent more spread, as forest fires tend to spread more faster.	They should get the detected area and alert.	High	Sprint-1
	Getting the Geographical Area	USN-1	As a user they should get the exact location of fire.	They should get the exact geographical area for them to reach there and prevent fire spread.	High	Sprint-1