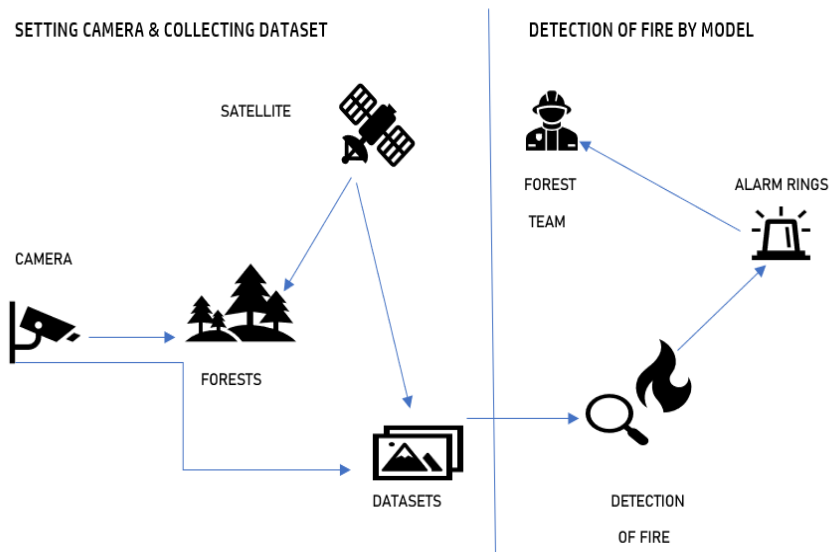


Project Design Phase-II Data Flow Diagram & User Stories

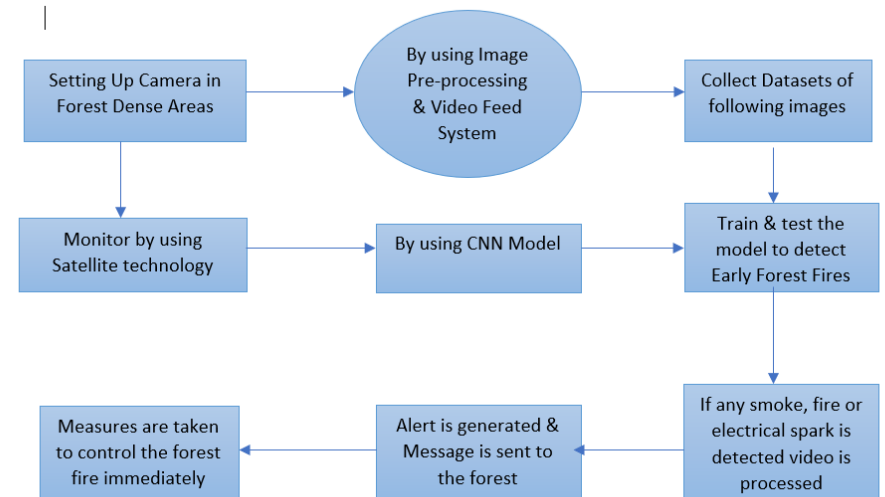
Date	17 October 2022
Team ID	PNT2022TMID24892
Project Name	Early Methods for Detection of Forest Fires
Maximum Marks	4 Marks

Data Flow Diagrams:

Example: [\(Simplified\)](#)



Example: DFD Level 0 (Industry Standard)



User Stories

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Forest Management Team	Initializing Camera	USN-1	As a user, the forest management team has to survey the forest by adding camera to the fire prone areas	The live video captured can be monitored	High	Sprint-1
		USN-2	As a user, the forest management team can get video feed which is used for processing	The camera sends video or image to the forest centre	High	Sprint-2
		USN-3	Along with forest team, the NGO can also get access of the video to take some early measurement of forest fires	They can also get the view of the live monitoring of forest	Low	Sprint-1
Technical Team	Image Classification	USN-4	By using CNN Model, the images captured by the camera is classified accordingly by testing & training the model	The model should be able to identify the difference between fire and a normal smoke	Medium	Sprint-2
	Using Open CV	USN-5	The recorded video is under monitoring continuously to determine the detection of early video	Therefore, by using CNN we can determine the input layer, classify the hidden layers and send warnings through output layer	High	Sprint-2
Alert Team	Twilio API	USN-6	Thus, after successful detection of fire by processing images. This, API sends the alert by buzzing the alarm and sends messages through chatbot	Thus, the immediate response which is required for earlier determination through sending quick responses	High	Sprint-2
Fire Management			They play the most important role to cool the fire and manage the excess spread of fire further	They take the following measures to stop fire from spreading	High	Sprint-2
Media & Nearby Residing People	News, Radio, Alerts,	USN-7	Protecting wildlife, human from the disaster caused	Thus, helping unit should be sent to protect lives.	Medium	Sprint-2