Project Design Phase-II
Data Flow Diagram & User Stories

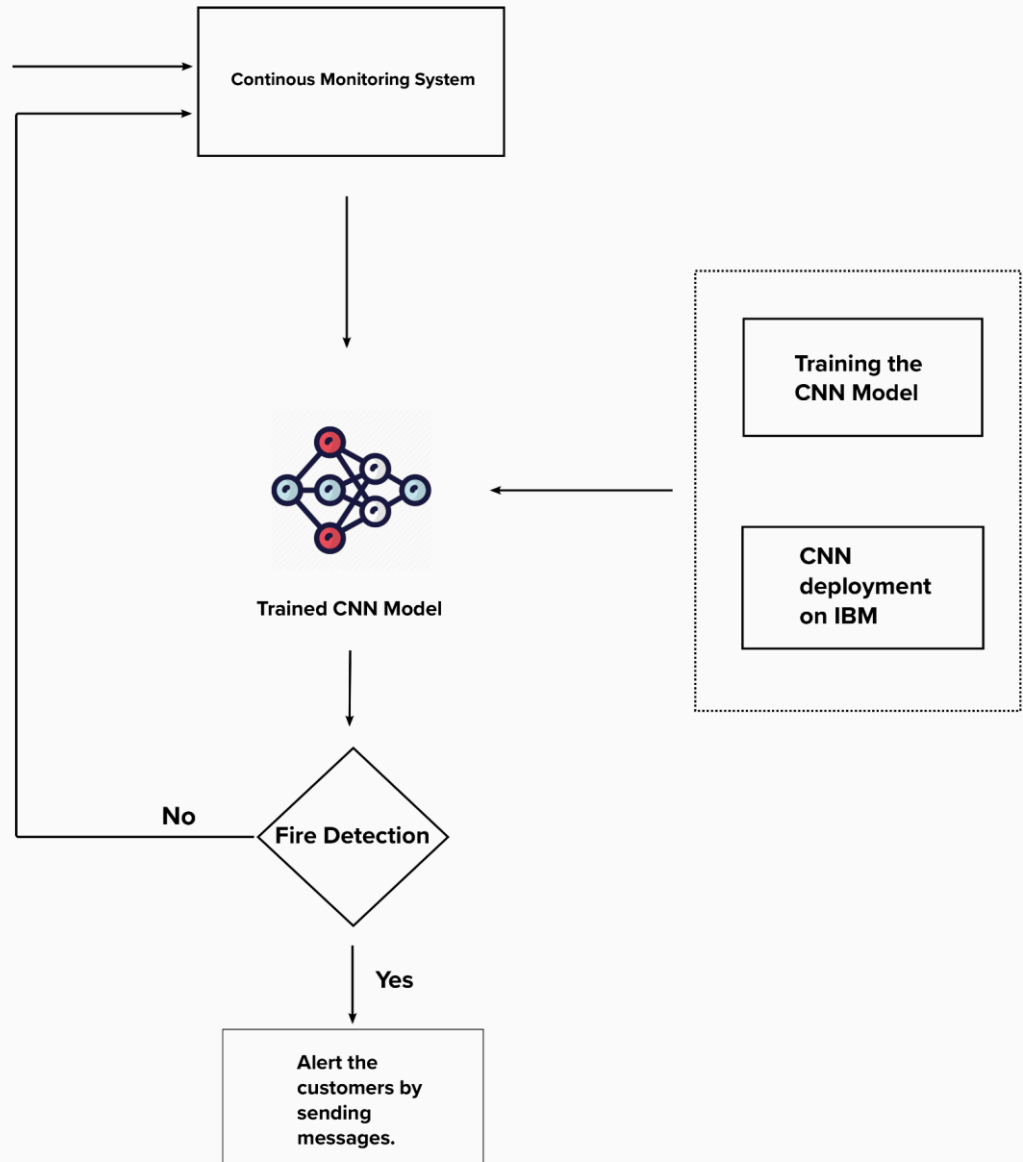| Date	16 October 2022
Team ID	PNT2022TMID06664
Project Name	Emerging methods for early detection of forest fires.

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.

Data Flow
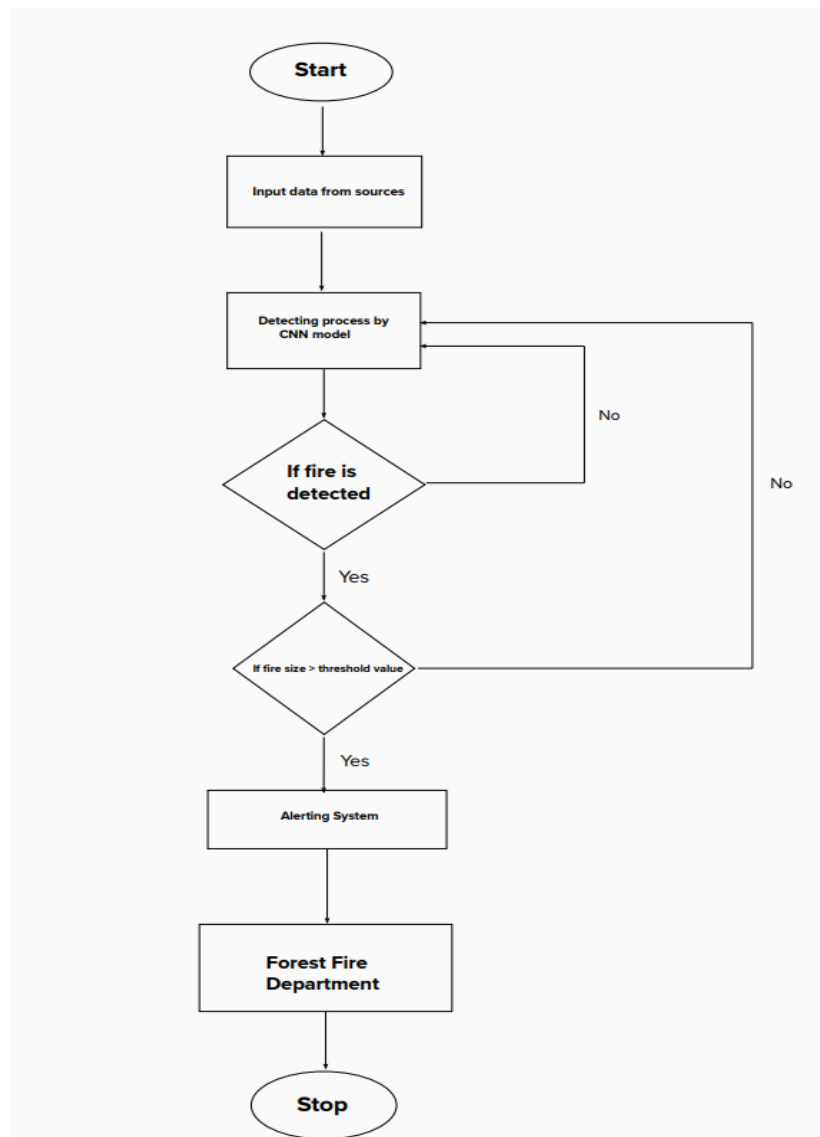
DFD Level 0 (Industry Standard)

Continous Monitoring System

Trained CNN Model

Training the CNN Model

CNN deployment on IBM

Fire Detection

No

Yes

Alert the customers by sending messages.

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
Customer (Forest Officer)	Registration	USN-1	As a user, I can register for the application by using government certified IDs.	I can access the account.	High	Sprint-1
	Authentication	USN-2	As a user, I will authenticate using ID credentials.	Can authenticate using IDs.	High	Sprint-1
	Login	USN-3	With the credentials the user can login easily.	Get the necessary information from the forest by this application.	Low	Sprint-1
	Training the system	USN-4	Model is trained with all different images of forest fires and in different dimensions.	By training, the model could learn how the forest fire looks.	Medium	Sprint-2
	Implementation	USN-5	The model is implemented to check its working and accuracy.	Here the accuracy of the algorithm is calculated with testing data.	Medium	Sprint-2
	Detector	USN-6	Detects the forest fire with the trained model given by the cameras as a stream of images or videos.	Models are supplied with the live images of forest to check and detect the fire..	High	Sprint-3
	Alarm System	USN-7	Once the cross the threshold an alarm will be send to the respective user (forest department officer)	Various API are used to send the alarm messages to the user.	High	Sprint-2
Customer Care Executive	Final Output	USN-8	On accurate detection of forest fire in early time the alarm messages are sent and necessary action to extinguish the fire is taken	The forest department will be alerted by the alarm messages sent by the model.	High	Sprint-4
Administrator	Controls and has overview of entire process	USN-9	The customer needs are checked and satisfied. Handle any sort of emergency and get it fixed.	Any issues or problems will be solved completely.	Medium	Sprint-4
	Database	USN-10	All the past datas are collected and stored for future reference.	Maintaining and managing large amounts of previous data.	Low	Sprint-4