Project Design Phase-II
Data Flow Diagram & User Stories

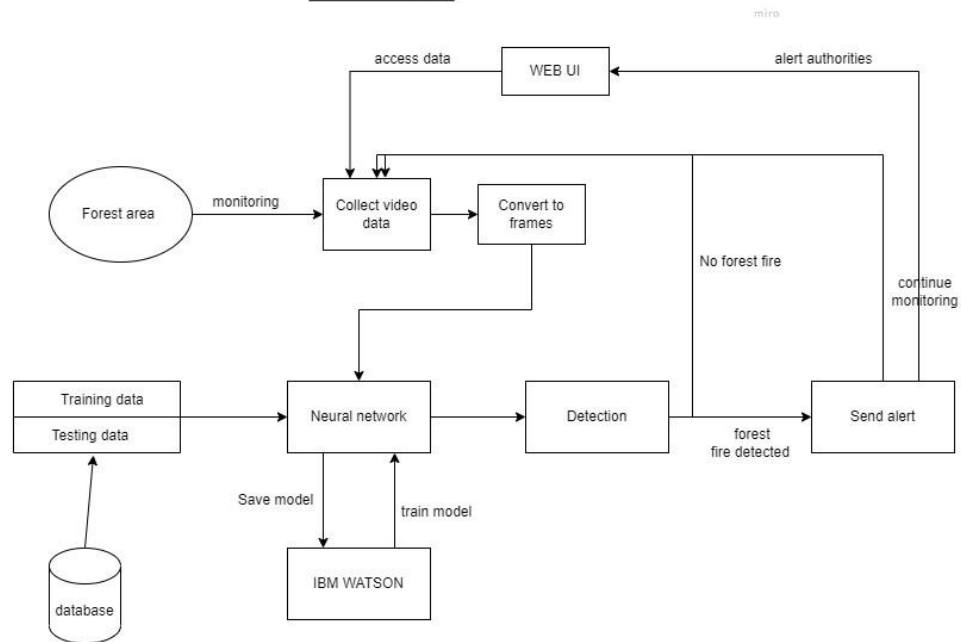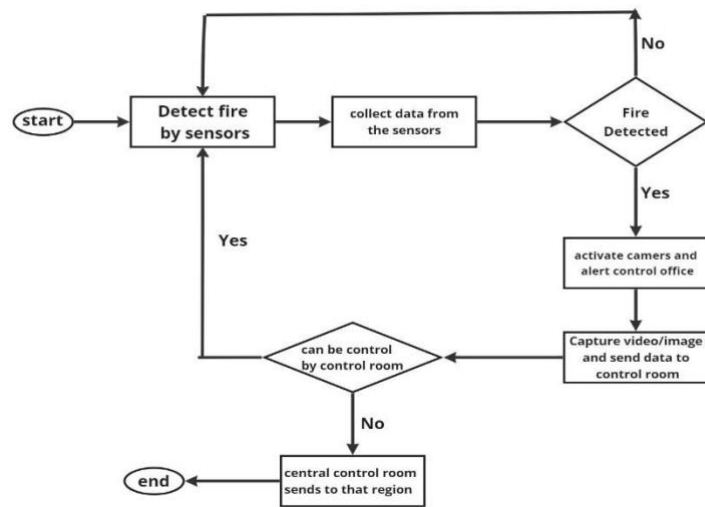| Date	26 October 2022
Team ID	PNT2022TMID34546
Project Name	EMERGING METHODS FOR EARLY DETECTION OF FOREST FIRES

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.

Example:

Example: DFD Level 0

DATA FLOW DIAGRAM - FIRE DETECTION

```
                              No
start → Detect fire → collect data from → Fire Detected
        by sensors     the sensors
                                          │ Yes
                                          ▼
                              activate camers and
                              alert control office
                                          │
                                          ▼
  Yes                         Capture video/image
                              and send data to
                              control room
        can be control ◄──────────
        by control room
              │ No
              ▼
    central control room → end
    sends to that region
```

```
                 access data      WEB UI       alert authorities
                                    │
Forest area → Collect video → Convert to                No forest fire        continue
 monitoring    data            frames                                         monitoring

Training data                                                                Send alert
             → Neural network → Detection
Testing data                              forest
                                          fire detected
                │ Save model    │ train model
                ▼
database        IBM WATSON
```

User Stories

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Customer (web user)	Registration	USN-1	As a user, I can register for the application by entering my email, password, and confirming my password.	I can access my account / dashboard	High	Sprint-1
		USN-2	As a user, I will receive confirmation email once I have registered for the application	I can receive confirmation email & click confirm	High	Sprint-2
	Login	USN-3	As a user, I can register for the application through Gmail single sign on	Registration sucessfull	Medium	Sprint-2
		USN-4	As a user, I can log into the application by entering email & password	Login successful	High	Sprint-1
	Dashboard	USN-5	As a user, I receive notification if any fire is detected	I can receive the notification if I'm the control service	High	Sprint-1
Administrator		USN-1	Admin is able to manage and maintain database	IBM Watson stores all the data	High	Sprint-1