

## **PROBLEM STATEMENT**

Fire safety in any place should be very important especially in homes ,large buildings and industries .It can cause damage to resources and may cause death . So preventing and controlling the fire in case of a fire combustion is very important.

### **Ideal situation :**

Ideally monitoring and detection of fire in large buildings/ industry should be responsive ,accurate and automatic without any intervention of humans,it should be able to detect and activate the fire defense mechanism like sprinkler etc.. as well as alerting the people in the building and the respective authorities .the fire management system can be able to control via app in the cloud.

### **Reality :**

But in reality the situation is not ideal because the fire management system in houses and industries are not very reliable ,efficient, cost effective and does not have any advance processing and does not have any features like automatic alert system for admin and authorities and in many buildings there are using older fire safety system that doesnt can even activate the sprinkler system and all of they don't communicate with each other properly to prevent false alarm also monitor the entire system using a applications

### **Consequences:**

Because of the current state of the fire safety system it is really hard to monitor and detect sudden fire combustion easily and effectively. This in turn results in poor work environment safety that can cause material and human loss in case of a fire outbreak.

### **Proposed Solution :**

We are trying to resolve this problem by building and intelligent fire management system using an iot device that can accurately ,effectively monitor and detect fire and automatically alert the people as well as the appropriate authority and activating the fire defense mechanism like sprinklers and be able to have fail safe like preventing from false alarm and know if the sprinklers are working properly from an application.