

# **Industry Specific Intelligent Fire Management System**

## **Problem statement:**

Numerous hostels are developing fire problems or risks, endangering the lives and possessions of guests. The system for fire detection and alert in case of fire outbreak should be devised and put into place to lessen that issue.

The project lessens the risk of fire: The technique to lessen the risk of fire in DIT hostels will be after developing and executing the circuit for fire detection and alarm in case smoke is found. to safeguard guests from fire-related harm or death. The technology notifies tenants when a fire starts so that they can work together to put it out.

## **Abstract**

In this project, we suggest an intuitive fire alarm management system that is user-friendly. In light of all the characteristics offered by the current model, we suggest a new model for tracking and reporting fire incidents. The proposed model's characteristics include efficient technique for safety methodical approach to monitoring and management. using wireless technology to transfer communications. Building health monitoring and structural problem detection made simple. Therefore, we are recommending a wireless, IOT-based fire alarm system that is simple to setup. The suggested system is an ad hoc network made up of many nodes and a microcontroller that is connected to sensors for smoke, temperature, humidity, flame, methane, and carbon monoxide. These sensors are used to monitor the environment and identify the presence of fire. When a node detects fire, it signals a central node, which then sends an SMS to the fire department and notifies the user.

## **Tool Required:**

Python, IOT Application Development, IBM cloud, IBMwatson