

# Industry-Specific Intelligent Fire Management System

## **Problem statement :**

Nowadays industry work is hard and produces more accidents. IoT technology uses automation functions to control accidents and disasters. The industry is using smart fire management systems. This smart fire management system uses a GAS Sensor, Flame Sensor, and Temperature Sensor. The gas sensor is used to detect any gas leakage and unwanted gases in closed areas. If gas is detected in the surroundings sensors are automatically activated. A flame sensor is used to capture the shape of the flame RGB colour model to identify the fire. Temperature Sensor, to check the amount of heat that is present in the surroundings. These sensors detect the fire, and when it is identified, then suddenly it forwards the alarm to alert the workers. When the alarm sound is received by the protocol, it releases all the doors in the industry and also alerts those members to get out of work from the industries. The sprinklers are activated and the water spears all the places of fire. This causes the workers to not panic when a flame is caught in the industries. It is very useful for workers and prevents the industries with a short period. When these sensors are not present in the industries, it is very hazardous to all workers and sometimes it creates severe injuries and even death. Emergency alerts are notified to the authorities and the Fire station. Through the smoke and gaseous substances, it can easily be detected by the sensor, due to this, the exhaust fan is turned on.