

INDUSTRY – SPECIFIC INTELLIGENT FIRE MANAGEMENT SYSTEM

PROJECT ABSTRACT

Team ID	PNT2022TMID30584
Project Name	Industry – Specific Intelligent Fire Management System

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The goal of an industry-specific intelligent fire management system is to prevent fire accidents and take appropriate measures to avoid disasters. The primary goal of the industry-specific intelligent fire management system is to prevent fire accidents caused by flammable gas, smoke, and temperature rise. The system is equipped with sensors that detect changes in the environment. If there is a discrepancy in the sensor readings, appropriate actions will be taken to prevent any misfortune. The model includes a MQ2 gas sensor for detecting propane and methane gases, an IR Flame sensor module for detecting flames, and an LM35 temperature sensor for measuring ambient temperature. The sensor readings are continuously monitored by IBM Watson IoT Platform and saved in Cloudant DB. In the event of any unfavourable changes, the authorities and fire station will be notified via the Fast2SMS web service. To detect changes in the environment, the smart fire management system includes a gas sensor, a flame sensor, and temperature sensors. The exhaust fans are activated based on the temperature readings and the presence of any gases. If a flame is detected, the sprinklers will activate automatically. Authorities and the Fire Station are notified of any emergency alerts.