Ideation Phase
Literature Survey

Date	10 September 2022
Team ID	PNT2022TMID32634
Project Name	Industry-Specific Intelligent Management System
Maximum Marks	4 Marks

Paper 1: Fire Detection, Monitoring and Alerting System based on IOT

Published year: 2019

Author name: Shreya Gosrani, Abhishek Jadhav, Krutika Lekhak D Chheda

Journal name: International journal of engineering applied science and technology

Summary:

Internet of Things refers to connecting things and people through internet, it has imposed itself as the new business practices in different sectors. To make quick and efficient response in real time, IoT enhances the way and provides emergency managers with the necessary information and communication to make use of those assets. In this paper it is proposed that a quick response for fire hazards is evaluated and examined by using IoT based model. Fire is one of the major reasons of accidental deaths in the world. To implement this proposed system a low-cost Wi-Fi module, gas detection sensor, Flame detection sensor, buzzer to alert and temperature sensors are used. The sensors detect and alerts the local emergency with the data collected by the system, and alerts organizations like fire departments, police stations and hospitals by sending the exact location to both user and operator through module which all are well connected with.

Methodology:

IoT framework concentrates on public safety and livelihood service sector The fire detecting system with IoT standardized design methods The spark Detection sensor PT333B is used to sense the spark, the Flammable gas sensor MQ-

6 is used to detect the gases like LPG/LNG and the GPS module is to obtain device location. These sensors along with Wi-Fi micro-controller are connected via Internet.

Paper 2: Fire Monitoring and Controlling System based on IOT

Authors: Nitin Galugade, Mahesh Jakkar, Devika Nair, Madhur Gawas

Journal name: International Journal of Engineering Research & Technology (IJERT)

Summary:

Fire being unattended can lead to a lot of losses like property, human, etc... This is an IOT (internet of things) based fire monitoring and controlling system which not only gives the real time information about the situation on the monitor but also takes the corrective action as per the need.

Methodology:

The sensors transfer data wirelessly with the help of MQTT (message queuing telemetry transport) networking protocol which is designed for constraints with low-bandwidth. MQTT allows us to send commands to control output, read and publish data from sensor nodes and much more.