Project Design Phase-II
Technology Stack (Architecture & Stack)

Date	03 October 2022
Team ID	PNT2022TMID54096
Project Name	Project - Industry-specific intelligent fire management system
Maximum Marks	4 Marks

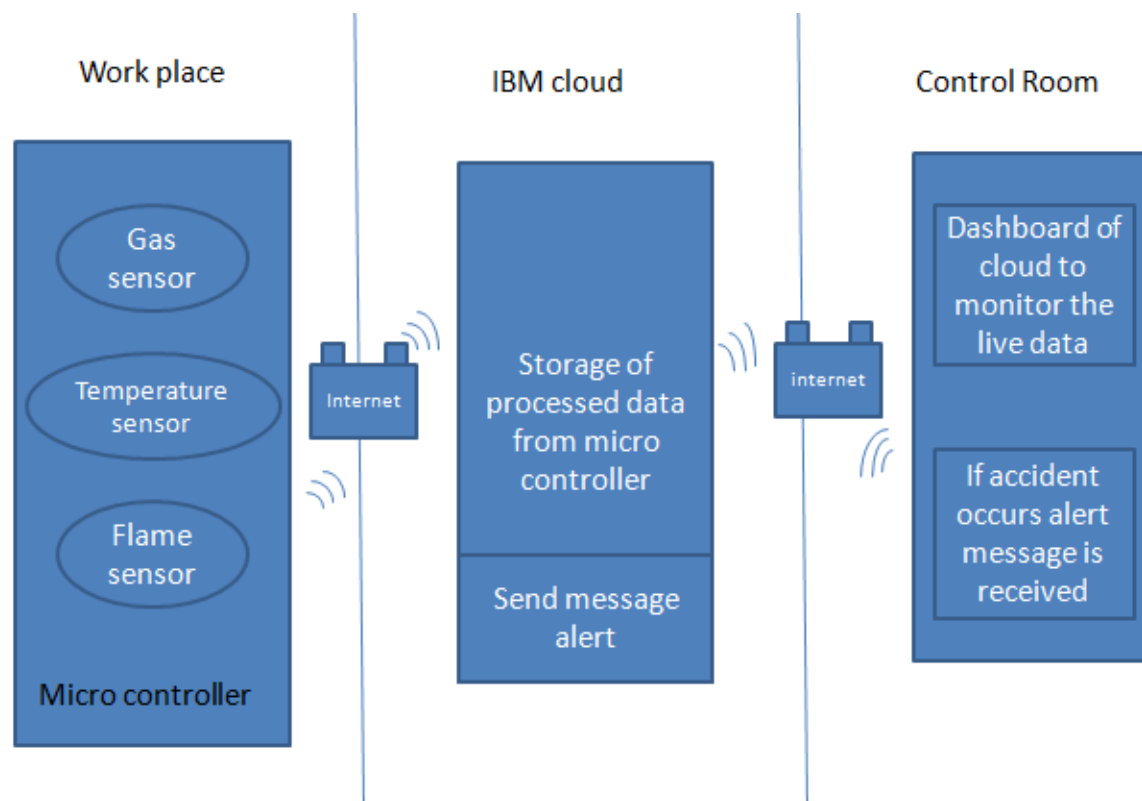**Table-1 : Components & Technologies:**

S.No	Component	Description	Technology
1.	User Interface	User can interact with node red application dashboard	node red
2.	Gas Sensor	gas sensor used detect presence of flamable gas	Embedded C
3.	Temperature Sensor	Used to detect the level of temperature	Embedded C
4.	Flame sensor	Used to detect the presence of fire	Embedded C
5.	Database	Data Type, Configurations etc.	IBM Cloud
6.	Cloud Database	Database Service on Cloud	IBM DB2, IBM Cloudant etc.
7.	Component - File Storage	File storage requirements	IBM Block Storage or Other Storage Service or Local Filesystem
8.	Raspberry Pi microcontroller	To process the data from the sensors	Python
9.	Infrastructure Cloud	Application Deployment on Cloud Cloud Server Configuration :	Technology - IBM Cloud

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Node Red IBM Watson	IOT, Internet
2.	Security Implementations	Data should be secure and accuracy	Firewall, Firebase
3.	Scalable Architecture	Used to access data from anywhere	IBM Cloud
4.	Availability	Available 24/7 data is transferred all-time	IBM Cloud
5.	Performance	Data are accurate and accessed by internet	IBM Cloud