

Project Design Phase-I

Proposed Solution

Date	25 September 2022
Team ID	PNT2022TMID19682
Project Name	Industry-specific intelligent fire management system
Maximum Marks	2 Marks

Proposed Solution

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	To create a smart industry-specific fire management system using IoT. It should have all the basic features for handling fire and report the incident to the fire department
2.	Idea / Solution description	Our solution is to provide a reliable smart fire management system that consists of exhaust fans, and sprinklers. We also ensure the proper working of sprinklers with flow sensors and check the water level for easy maintenance. It also sends periodic data to the safety sector in the company, in case of a negative situation it sends an alert to the fire department. The toxic gases and excess hydrogen and oxygen from water vapour are redirected towards outdoors by using an exhaust fan to avoid further combustion or spreading of flames by those gases.
3.	Novelty / Uniqueness	As a sprinkler gives an instant and efficient way to put down fire, we need to check the water source and the connection to it with the sprinkler this increase additional work and maintenance. This is solved by our smart system
4.	Social Impact / Customer Satisfaction	This gives a simple and powerful system making the focus and time more towards safety and not maintenance. This cuts the cost spend on maintenance, as it can be invested in other sectors.
5.	Business Model (Revenue Model)	It will cost an installation fee then the cloud and maintenance of the devices are handled in the subscription model. An additional scaling fee is also charged
6.	Scalability of the Solution	In medium or large-scale industries it is scalable. They can add any number of devices which are handled coherently in the cloud.