

Project Design Phase-I

Proposed Solution

Assignment Date	19 September 2022
Team ID	PNT2022TMID35665
Project Name	Project - Industry-specific intelligent fire management system
Maximum Marks	2 Marks

Proposed solution:

S.No.	Parameter	Description
1.	Problem Statement(Problem to be Solved)	✂ The problem is to ensure the safety of the industries from fires accident before any serious accident happens. This Fire management system should ensure that the fire should be extinguished as well as the authorized person is alerted about the fire incident.
2.	Idea / Solution description	✂ The main idea of this Fire management system is to make sure no fire is spread and to prevent any major fire accidents. This is done by employing a number of sensors as Flame sensor, Temperature sensor, Humidity Sensor and Gas sensor. The readings from these sensors are fed to a Node MCU which in turn will turn on the sprinkler and fans which control the fire.
3.	Novelty / Uniqueness	✂ This Fire management system is a integrated system of sensors and MCU. This has the unique feature of alerting the authorized Person through SMS or mail. The fire is also control through water sprinklers and exhaust fans

		<ul style="list-style-type: none"> ✕ Through the IBM cloud our management system not only notifies the industry person but also nearby fire stations. ✕ Low latencies which makes sure that the authorized persons are notified immediately which make the system more efficient. ✕ If a gas leak occurs within the industry or in a residential area, the fans are turned on to expel the gas.
4.	Social Impact / Customer Satisfaction	<ul style="list-style-type: none"> ✕ Prevention is better than curing in that way our Fire management system prevents any major fire accidents. Which in turn would make sure that every person in the building is safe ✕ This Fire Management System will be extremely beneficial to the worker and the communities that are associated with the near industries. ✕ This solution will help many people's life and save a lot of assets from being engulfed in fire. ✕ This makes sure all the workers and employers can rest assured knowing no fire accidents can occur in the industries being the industry is monitored 24/7 by our Fire management system.
5.	Business Model (Revenue Model)	<ul style="list-style-type: none"> ✕ Being deployed in the industries which are the major fire prone zones. The industry ownerships can be assured the safety and can be assured that they can minimize the loss in case of accident will make a way for our Fire Management system. ✕ The Agenda of this Fire management system will be to

		<p>save people from big fire accidents. Since people are concerned about their life and assets deploying a Fire management system in industry will be a beneficial Business model.</p>
6.	Scalability of the solution	<ul style="list-style-type: none"> ✕ Since the primary concern of the model is reduction of loss and safety of people the scalability of the model is not limited. ✕ Every industry will prefers to have a Fire management system than to face the loss. ✕ So the scalability of the model is huge where it serves a demanding role in each industry.