

**Project Design Phase-I**  
**Proposed Solution Template**

Date	01 October 2022
Team ID	PNT2022TMID10960
Project Name	Project – Industry –specific intelligent fire management system
Maximum Marks	2 Marks

**Proposed Solution Template:**

Project team shall fill the following information in proposed solution template.

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	<ul style="list-style-type: none"> <li>The smart fire management system includes a Gas sensor, Flame sensor and temperature sensors to detect any changes in the environment.</li> <li>Based on the temperature readings and if any Gases are present the exhaust fans are powered ON.</li> <li>If any flame is detected the sprinklers will be switched on automatically.</li> <li>Emergency alerts are notified to the authorities and Fire station</li> <li>Access the needs of fire breakout buildings.</li> </ul>
2.	Idea / Solution description	<ul style="list-style-type: none"> <li>Intelligent fire management system is otherwise known as addressable fire alarms, intelligent control systems are more sophisticated than conventional fire alarm systems and are able to provide an exact location of the event.</li> <li>IOT device</li> <li>Temperature sensor by IOT</li> <li>Gas sensor</li> <li>Flame sensor</li> </ul>

3.	Novelty / Uniqueness	<ul style="list-style-type: none"> <li>• Collaboration work of IOT platform and sensors</li> <li>• Prior information about fire breakout can be intimated</li> <li>• By using IOT based sensor addressable systems provide a greater level of fire safety because they allow fire fighters to respond more quickly and effectively by pinpointing the exact location of a fire in a building.</li> </ul>
4.	Social Impact / Customer Satisfaction	<ul style="list-style-type: none"> <li>• It serves value to users, Fire detection systems increase response times, as they are able to alert the correct people in order to extinguish the fire.</li> </ul>
5.	Business Model (Revenue Model)	<ul style="list-style-type: none"> <li>• Reduces the amount of damage to the property.</li> <li>• Fire detection systems can be connected to sprinklers that will automatically respond when a fire is detected.</li> </ul>
6.	Scalability of the Solution	<ul style="list-style-type: none"> <li>• Python</li> <li>• IOT Application Development</li> <li>• IBM Cloud</li> <li>• IBM Watson</li> </ul>