**PROJECT DESIGN PHASE – I**
**PROPOSED SOLUTION TEMPLATE**

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| Date | 01 October 2022 |
| Team ID | PNT2022TMID35457 |
| 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) | Fire alarm systems are only effective if they can generate reliable and fast fire alerts with exact location of fire. There is a direct correlation between the amount of damage caused by fire and interventions time in various fire alarm systems. As the time of intervention decreases, the damage also decreases. |
| 2. | Idea / Solution description | • The smart fire management system includes a gas sensor, flame sensor, humidity sensor and temperature sensors to detect any changes in the environment.<br>• Based on the temperature readings and if any gases are present the exhaust fans are powered ON.<br>• If any flame is detected the sprinklers will be switched on automatically.<br>• Emergency alerts are notified to the authorities and Fire station. |
| 3. | Novelty / Uniqueness | • Temperature Sensor<br>• Flame sensor<br>• Smoke sensor<br>• Humidity sensor<br>• Automatic water sprinkler<br>• Buzzer<br>• Cloud DB to store Data |
| 4. | Social Impact / Customer Satisfaction | • Fire alarms save lives: A combination of smoke and heat detectors, sirens and bells, and strobe lights detect fires and alert building occupants, giving them ample time to evacuate in an orderly fashion. |

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| | | • Fire alarms reduce property loss: Monitored fire alarm systems automatically notify emergency responders and fire trucks dispatch to your location without delay.<br>• To avoid the fire accidents that happen in the industries.<br>• Alerts the local fire department |
| 5. | Business Model (Revenue Model) | Less building damage means shorter downtime until you can reopen for business. This cuts your losses from the fire even more, allowing you to return to business as usual before long. |
| 6. | Scalability of the Solution | • IBM Platform<br>• Sensors<br>• Python |