Project Design Phase-II
Solution Requirements (Functional & Non-functional)

Date	22 October 2022
Team ID	PNT2022TMID17652
Project Name	INDUSTRY-SPECIFIC INTELLIGENT FIRE MANAGEMENT SYSTEM
Maximum Marks	4 Marks

Functional Requirements:

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	Emergency alert	Alert through SMS. Alert through audible and visible alarms
FR-2	User Understanding	Based on the data, the user understands that if any of the data is above the threshold value, then there is a fire burst.
FR-3	User action	In case of fire bursts, the user needs to take actions like find the best escape route, evacuate the workers and take necessary actions to control the fire.
FR-4	Control functions	Activation of duct mounted smoke mounted detector will shut down the heating ventilation and air conditioning equipment to prevent the migration of smoke to non-affected areas of the building
FR-5	Location notification	Location of fire must be sent to fire department through alarm.

Non-functional Requirements:

Following are the non-functional requirements of the proposed solution.

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	• Visual and audio signalization. • It provides zonal coverage. • Protect your property
NFR-2	**Security**	• Warn people when smoke ,fire ,carbon monoxide. • Ensure the protection of both valuable items and human life.
NFR-3	**Reliability**	• Response timer will be faster • Reliable fire alarm systems are largely influenced. • It may be capable of precisely identifying the smoke, and it doesn't issue an erroneous warning or signal.

NFR-4	**Performance**	1. Detect a fire. 2. Alert occupants of the fire condition. 3. Activate safety control functions. 4. Alert the local fire department.
NFR-5	**Availability**	• Ability to use the system for other types of emergency communication. • It is useful to people because it is accessible throughout the day and night.
NFR-6	**Scalability**	The sensors and boards used in this system should be able to easily alter and overhaul in accordance with required changes.