

Project Design Phase-II

Solution Requirements (Functional & Non-functional)

Date	19 October 2022
Team ID	PNT2022TMID33506
Project Name	Project – 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	User Registration	Registration through Form Registration through Gmail Registration through LinkedIn
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	Rapid Detection	The system must be able to detect a fire rapidly(within seconds/ minutes) .
FR-4	Automation, Autonomy	The system must be able to activate and function completely autonomously, without any external network or power and without human intervention.
FR-5	Web Server	The system must have a built-in web server, that allows providing personnel with a real time alerts.
FR-6	Multiple flames	The system must be able to handle multiple fires simultaneously.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	With IOT, safety alerts can be sent to hundreds of people fast and effectively. Several leading fire safety companies have already launched IOT-enabled fire detectors.
NFR-2	Security	It 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, and takes necessary preventive measures.
NFR-3	Reliability	It is a reliable fire alarm system that quickly detect a fire and provide clear messages within the facility with least disruption to the operations of buildings.
NFR-4	Performance	The system is able to communicate in real time with the other devices and can be programmed to take a limited judgemental call for a pre-decided actions. In the event of an alarm, the detectors can sound a local alarm as well as send notifications on the mobile phones.
NFR-5	Availability	Technology is also available today to add connectivity to existing detectors. With a monitor, users don't have to change all the detectors. The monitor listens for the specific frequency of these detectors and sends an alert. One single monitor can cover multiple detectors covering large areas.
NFR-6	Scalability	It provide a great deal of flexibility and can accommodate far more devices.