

Project Design Phase-II

Solution Requirements (Functional & Non-functional)

Date	12 October, 2022
Team ID	PNT2022TMID10980
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 Requirements	Monitor the gas, temperature, and flame. In the event of a gas leak, turn on the exhaust fans. In the event of a fire, activate the sprinklers and Notify the fire station and authorities.
FR-2	User Registration	Manual registration Registration through the webpage Registration through the form Registration through Gmail
FR-3	User Confirmation	Confirmation via Phone Confirmation via Email Confirmation via OTP
FR-4	Payment Options	Cash on Delivery Net Banking/UPI Credit/Debit/ATM Card
FR-5	Product Delivery and Installation	Door Step delivery Free Installation and 5 year Warranty
FR-6	Product Feedback	Through Webpage Through Phone calls and G-mails Through Google forms

Non-functional Requirements:

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

NFR No.	Non-Functional Requirement	Description
NFR-1	Usability	It's mostly automatic So, it can manage the fire itself. This automated feature makes usability easier
NFR-2	Security	The system itself is used to manage fires and secure people It did not cause any accidents It's just working on the methods of sensing and detecting, so it doesn't affect the user's devices and data.
NFR-3	Reliability	Regular maintenance of hardware like sensors, exhaust fans, and sprinklers and periodic service of the system is mandatory. If these are done perfectly, then the system is more reliable.
NFR-4	Performance	It's a smart fire management system which, detect the changes in the environment. If gases or flames are detected, the exhaust fans will be powered on and the sprinklers will be switched on automatically, respectively. And, alerts the authorities and the fire station. However, all of this requires a specification system within RAM-Minimum of 4GB and a processor-Min. configuration OS-Windows/Linux/MAC. So, the performance is more efficient.
NFR-5	Availability	Due to its automation, detection, and management features, this system will be available everywhere with high demand. It replaces three different systems.
NFR-6	Scalability	The system has to sense the given space and sprinkle precisely in the place of fire. In the case of communication, irrespective of the distance or signal, it must inform the fire station.