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

Date	15 October 2022
Team ID	PNT2022TMID42571
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 phone number
FR-2	User Registration Successful	Registration Successful message in web window Storing the registered data in IBM Cloundant
FR-3	Creating IOT Devices	Creating Sensors in IOT Watson Platform Creating a simulation and sending data to NODE-RED Dashboard
FR-4	Monitoring the Sensor values	Creating a Node-RED Dashboard Publishing the data in the dashboard
FR-5	Sending Emergency Alerts	Fetching the phone number of the registered users and Sending emergency alerts through FastSMS

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	The system should be easy for the customers to use. Ease to maintenance. Low pressure to workload. The instructions should be straightforward.
NFR-2	**Security**	No should have access to modify the data sent from the sensors. It should resist the attacks made by the hackers.
NFR-3	**Reliability**	The system should be made fail-safe operation using redundancy. If one module fails then the parallel module should take over the operation. Response timer will be faster. Hardware components are routinely examined.

NFR-4	**Performance**	All the modules should work without any connection interruption. Quickly Responsive. Efficiency is higher than fire alarms
NFR-5	**Availability**	The system should be continuously monitoring the environment 24/7. Ability to use the system for other types of emergency communication. Based on the user's needs, all function should be offered.
NFR-6	**Scalability**	The system should have the capacity to accommodate a greater amount of usage. Easy to adoptable for future changes. Based on Fire alarm signals and should cover the entire Placed.