

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

Date	21 October 2022
Team ID	PNT2022TMID18102
Project Name	Hazardous area monitoring for industrial plant powered by IoT
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	Data gathering	Gathering temperature and gases values using sensors interfaced with ESP32 or Arduino and sending to the cloud.
FR-2	Dashboard	The admin can monitor the values from the IBM cloud dashboard through mobile application.
FR-3	SMS notification	If the sensor values exceed the set threshold, then a SMS is sent to the admin

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	The sensors can be easily powered and be placed.
NFR-2	Security	Data from the sensors is stored in cloud which provides security
NFR-3	Reliability	The data can be retrieved directly from the cloud
NFR-4	Performance	There is less delay in getting values from the sensor to the cloud
NFR-5	Availability	The data can be viewed from anywhere
NFR-6	Scalability	The sensors can be placed in a large area