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

Date	03 October 2022
Team ID	PNT2022MID21386
Project Name	Gas leakage Monitoring and alerting 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	Business Requirements	This system can be implemented in homes Industries. The main advantage of this IoT and Arduino-based application is that it can determine the leakage and send the data over to a site. It can be monitored, and preventive measures can be taken to avoid any disaster.
FR-2	User Confirmation	Send the details through blynk app.
FR-3	Future Requirements	The gas leakage detection system can be optimized for detecting toxic gasses along with upgrading them with smoke and fire detectors to identify the presence of smoke and fire. Ensuring worker safety is important but making using of the right technology is even more vital.
FR-4	Product Requirements	Detect the gas is necessary regardless of your business role or individual purpose. Certain technologies make such IoT devices what they are, and if you want to indulge in IoT application development, you must know what they are and what purpose they can fulfil.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	The system must be able to detect and update whenever & wherever required.
NFR-2	**Security**	Select a software option that securely backs your data up nearly every second, onto safe and reliable servers, with real-time database application
NFR-3	**Reliability**	We using blynk application for monitoring the data software takes an hour to run a basic report if it can run reports but you get an error message half of the time, there's a reliability problem.
NFR-4	**Performance**	The system should be able to detect properly at times of fatal conditions and provide necessary driving measures.
NFR-5	**Availability**	Under a given set of environmental conditions how the operational element performed in a set of time.
NFR-6	**Scalability**	The system should be compatible with developed specifications and also be open for future upgradation.