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

Date	03 October 2022
Team ID	PNT2022TMID25834
Project Name	Project – Smart Farmer-IOT Enabled Smart Farming Application
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		
FR-4		

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	Smart farming has enabled farmers to reduce waste and enhance productivity with the help of sensors and automation of irrigation systems. Further with the help of these sensors, farmers can monitor the field conditions from anywhere.
NFR-2	**Security**	The adoption of sensor based technologies and cloud supported smart applications in agriculture has unleashed opportunities for adversaries to orchestrate cyber attacks. Therefore, it is important to first understand major security and privacy issues in smart farming domain before discussing specific cyber attacks.
NFR-3	**Reliability**	An adaptive network mechanism is designed to improve the network performance of the system, in order to achieve a more reliable smart farm system.

NFR-4	**Performance**	The system was tested on okra plants and their vegetative traits were measured for 30 days. The result revealed good performance which proves that the developed system is suitable for smart farming system.
NFR-5	**Availability**	With smart sensors that monitor every aspect of everyday work automatically, IOT technology for agriculture allows farmers to automate real-time data collection to increase production volumes, reduce costs and manage expenses and improve overall efficiency in many different aspects of agriculture.
NFR-6	**Scalability**	It refers to the adaptability of a system to increase the capacity. For example, the number of technology devices such as sensors and actuators, while enabling timely analysis.