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

Date	03 October 2022
Team ID	PNT2022TMID32919
Project Name	Project - SmartFarmer - 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	Log in to the system	verify credentials examine the access roles
FR-4	Manage Module	Manage roles of user Manage user permission
FR-5	Check crop condition	Temperature details Crop details Water details
FR-6	Log out	Exit

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	Usability includes easy learn ability, efficiency in use, remember ability, lack of errors in operation and subjective pleasure.
NFR-2	**Security**	Sensitive and private data must be protected from their production until the decision-making and storage stages.
NFR-3	**Reliability**	A superior cost-to-reliability trade-off is made possible through shared protection. To prevent agricultural service interruptions, the approach employs specialised and shared protection methods.
NFR-4	**Performance**	It will be more effective to monitor farming operations overall if integrated sensors are used to measure soil and ambient characteristics.

NFR-5	**Availability**	By connecting information about crops, weather, and equipment, automatic temperature, humidity, and other equipment adjustments are made feasible.
NFR-6	**Scalability**	Scalability is a big issue with IoT platforms. It has demonstrated how different IoT platform architecture choices effect system scalability and that automated real-time decision-making is feasible in a setting with thousands of users.