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

Date	14 October 2022
Team ID	PNT2022TMID38150
Project Name	Smart Farmer – IOT Enabled Smart Farming Application
Maximum Marks	4 Marks

Functional Requirements:

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	Usability is defined as the ability to learn quickly, use something effectively, remember something, operate something without making a mistake, and enjoy something.
NFR-2	**Security**	Private and confidential information must be kept secure at all times, including during collection, processing, and storage.
NFR-3	**Reliability**	A superior cost-to-reliability trade-off is achieved with 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 tying information about crops, weather, and equipment together, it is feasible to automatically alter temperature, humidity, and other factors in farming equipment.

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 Gmail
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	Log in to system	Check Roles of Access. Check Credentials
FR-4	Manage Modules	Manage System Admins Manage Roles of User Manage User permission
FR-5	Check whether details	Temperature details Humidity details
FR-6	Log out	Exit

Non-functional Requirements:

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

NFR-6	**Scalability**	For IoT platforms, scalability is a big challenge. It has been demonstrated that different IoT platform architectural decisions impact system scalability and that automatic real-time decision-making is possible in a setting with thousands of users.