Project Design Phase - II

Solution Requirements (Functional & Non-functional)

Date	12 October 2022
Team ID	PNT2022TMID12810
Project Name	SMART FARMER – IOT ENABLED SMARTFARMING APPLICATION SYSTEM.
Maximum Marks	4 Marks

Functional Requirements:

Following are the functional requirements of the proposed solution.

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	Usability covers features including ease of learning, effectiveness in usage, memory retention, lack of operational errors, and subjective enjoyment.
NFR-2	Security	Private and sensitive 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 unique and shared protection methods.

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 Credentials Check Roles of Access.
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-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	Linking information about crops, weather, and equipment to automatically modify temperature, humidity, etc. allows for the automatic adjustment of farming equipment.
NFR-6	Scalability	For IoT platforms, scalability is a big challenge. It has demonstrated how different IoT platform architectural choices impact system scalability and that automatic real-time decision-making is possible in a setting with thousands of people.