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

Date	13 October 2022
Team ID	PNT2022TMID47705
Project Name	Project – IOT ENABLED SMART FARMING APPLICATION 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	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
	S	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.

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	The shared protection achieves a better trade-off
		between costs and reliability.
		The model uses dedicated and shared protection
		schemes to avoid farm service outages.
NFR-4	Performance	the idea of implementing integrated sensors with
		sensing soil and environmental or ambient
		parameters in farming will be more efficient for
		overall monitoring.
NFR-5	Availability	Automatic adjustment of farming equipment made
		possible by linking information like crops/weather

		and equipment to auto-adjust temperature, humidity, etc.
NFR-6	Scalability	scalability is a major concern for IoT platforms. It has been shown that different architectural choices of IoT platforms affect system scalability and that automatic real time decision-making is feasible in an environment composed of dozens of thousand.