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

Date	14 October 2022
Team ID	PNT2022TMID14367
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	•	Sub Requirement (Story / Sub-Task)
No.	(Epic)	
FR-1	User Registration	User Registration is through Gmail or
		Form
FR-2	User Confirmation	Confirmation via Email or Confirmation
		via OTP
FR-3	Log in to system	Once confirmation message is
		received, login the system and Check
		the Credentials
FR-4	Check Credentials	The credentials are checked, then
		proceeded to the Manage modules.
FR-5	Manage modules	The manage modules describes the
		below functions
		Like : it manages the role of the user
		and manage the user permission.
FR-6	Data Management	Manages the data of the weather
		conditions, crop conditions and live stock
		conditions

Non-functional Requirements:

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

FR	Non-Functional	Description
No.	Requirement	

NFR-1	Usability	It involves understanding the users
	-	and their associated parameters such
		as their expectations, needs, behaviors,
		interests and responsibilities.It also
		suggests maximizing the stabilityof the
		interface by avoiding abrupt and far
		reaching changes of the view when
		they are not necessary.
NFR-2	Security	It enables the confidentiality, integrity
		and availability.These are the basic
		building blocks of any security.
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.