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

Date	16 November 2022
Team ID	PNT2022TMID05698
Project Name	Project – Smart Farmer-IOT enabled smart farming application

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	Enter e-mail address and password
		E-mail: Enter email address
		Password: Enter password
FR-2	User Confirmation	Confirmation via Email
		Confirmation via OTP
FR-3	Log In	It will serve authentication for Logging into the system
FR-4	Manage modules	It will manage system admins, roles of user and user permission
FR-5	Check whether condition	It will perform Temperature monitoring status and humidity monitoring status
FR-6	Log Out	Exit from the system

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	Better understanding of the application, learning ability, usage efficiency, technology advancement and time saving.
NFR-2	Security	Their preferences and decisions are kept secret. Their data would help them to achieve greater yield by analysing the records kept secretly.
NFR-3	Reliability	The shared protection achieves a better trade-off between costs and reliability. The model uses dedicated and shared protection methodology to avoid farm service outages.
NFR-4	Performance	The process of implementing integrated sensors with sensing soil and environmental parameters in farming will be more efficient. Since performance is a major concern for customers, it would attract them.

NFR-5	Availability	Automatic adjustment of farming equipment made possible by linking information like crops or weather and equipment to auto-adjust temperature, humidity, etc.
NFR-6	Scalability	Scalability is a major concern for IoT platforms. It has shown that different architectural choices of IoT platforms affect system scalability, real time decision making is feasible in an environment.