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

Date	03 October 2022
Team ID	PNT2022TMID52019
Project Name	Smart Farmer- IoT Enabled Smart Farming
	Application
Maximum Marks	4 Marks

Functional Requirements:

Following are the functional requirements of the proposed solution.

FR	Functional	Sub Requirement (Story / Sub-Task)
No.	Requirement (Epic)	
FR-1	User Registration	Registration through Gmail
FR-2	User Confirmation	Confirmation through registered Email via OTP
FR-3	Log in to system	Check credentials and allow user to enter the main page with regarding their roles
FR-4	Software	Web UI, Node-red, IBM Watson, MIT app
FR-5	IOT devices	Sensors, Relays and Wi-fi module

Non-functional Requirements:

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

FR No.	Non-Functional	Description
	Requirement	
NFR-1	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
NFR-3	Reliability	Farmer can get a field task
		accomplished in a timely manner, it
		also reduces lost time and productivity.
NFR-4	Performance	Smart farms are accurate farms oriented
		to increase efficiency
NFR-5	Availability	With permitted network connectivity
		the application is accessible.
		The availability of low-cost cloud
		services encourages farmers to adopt
		smart farming
NFR-6	Scalability	It is perfectly scalable many new
		constraints can be added