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

Date	17 October 2022
Team ID	PNT2022TMID02650
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 Form
		Registration through Gmail
		Registration through LinkedIN
FR-2	User Confirmation	As a user Confirmation via Email then generate the
		Confirmation via OTP
FR-3	Login in to system	Once confirmation message received after go to the
		manage modules.
FR-4	Check Credentials	Once check the credentials after go to manage
		modules. manage roles of user
		Manage user permission
FR-5	Manage modules	In this manage modules descried the below function
		like
		Manage system admins
		Manage roles of user
		Manage user permission and manage temperature and
		humidity details
FR-6	Logout	Then manage the data of weather conditions
		Manage the data of crop conditions and live stock
		conditions then logout or exist the application.

## **Non-functional Requirements:**

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	<ul> <li>User friendly guidelines for users to avail the features.</li> <li>Most simplistic user interface for ease of use.</li> </ul>
NFR-2	Security	Sensitive and private data must be protected from their production until the decision-making and storage stages

		<ul> <li>All the details about the user are protected from unauthorized access.</li> <li>Detection and identification of any misfunctions of sensors.</li> </ul>
NFR-3	Reliability	<ul> <li>The shared protection achieves a better trade-off between costs and reliability.</li> <li>The model uses dedicated and shared protection schemes to avoid farm service outages.</li> </ul>
NFR-4	Performance	The use of modern technology solutions helps to achieve the maximum performances thus resulting in better quality and quantity yields.
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.