

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

Date	03 October 2022
Team ID	PNT2022TMID48510
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 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 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	<b>Usability</b>	Usability includes easy learn ability, efficiency in use, remember ability, lack of errors in operation and subjective pleasure.
NFR-2	<b>Security</b>	Sensitive and private data must be protected from their production until the decision making and storage stages.
NFR-3	<b>Reliability</b>	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	<b>Performance</b>	The idea of implementing intergrated sensors with sensing soil and environmental or ambient parameters in farming will be more efficient for overall monitoring.

NFR-5	<b>Availability</b>	Automatic adjustment of farming equipment made possible by linking information like crops/weather and equipment to auto-adjust temperature, humidity, etc.
NFR-6	<b>Scalability</b>	Scalability is a major concern for IOT platforms. It has 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.