

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

Date	12 October 2022
Team ID	PNT2022TMID04665
Project Name	SmartFarmer - IoT Enabled Smart Farming Application
Maximum Marks	4 Marks

**Functional Requirements:**

Following are the functional requirements of the proposed solution.

<b>FR No.</b>	<b>Functional Requirement (Epic)</b>	<b>Sub Requirement (Story / Sub-Task)</b>
FR-1	User Registration	As a user, sign up using Gmail
FR-2	Login	After login, Credentials are Check
FR-3	Check Credentials	Once check the credentials after go to the Dashboard.
FR-4	Sensor Function	Measure Temperature and Humidity Measure Soil moisture
FR-5	Dashboard	Temperature Details Humidity Details Soil Moisture Details Motor ON/OFF Function
FR-6	Logout	exit the application or log out.

### 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 comprises simplicity of learning, effectiveness of usage, and recall skills, lack Of errors in operations, and subjective pleasure
NFR-2	<b>Security</b>	Sensitive and private information must be safeguarded. their processing is until the decision-making and storage
NFR-3	<b>Reliability</b>	The shared protection results in a better trade-off between cost and reliability The model employs both dedicated and shared security schemes to avoid farm service interruptions
NFR-4	<b>Performance</b>	The concept of integrating sensors with soil sensing and environmental or ambient farming parameters will be more efficient for overall supervision
NFR-5	<b>Availability</b>	The weather details is available in the app everytime
NFR-6	<b>Scalability</b>	Scalability is an important consideration for IoT platforms. It has been demonstrated that different architectural choices of IoT platforms affect system scalability and that automatic real-time decision-making is possible in an environment composed of tens of thousands of devices.