

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

Date	16 October 2022
Team ID	PNT2022TMID14459
Project Name	SmartFarmer - 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	Users should register via Gmail
FR-2	User Authentication	The identity of the user is verified
FR-3	Rules and conditions	User should accept the regulations and principles
FR-4	Authorization	Official access permission will be granted
FR-5	Log in to the system	Log in to the system and check the credentials
FR-6	Manage the activity	Then check the temperature, humidity and moisture content of the soil
FR-7	Log out	Then log out of the system

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	Usability refers to the quality of a user's experience when interacting with products or systems, including websites, software, devices, or applications. Usability is about effectiveness and efficiency. Our system provides overall satisfaction to the user.
NFR-2	Security	Our security system is intended to prevent the manipulation of data and processes by unauthorized third parties.
NFR-3	Reliability	Our model is reliable because of the probability of performing a specified function without failure under given conditions for a specified period of time.
NFR-4	Performance	Using this technology, farmers can plant, water, maintain and harvest crops with the highest efficiency, which helps to improve the use of land and resources

NFR-5	Availability	The proposed model has suitable recoverability and protection from system failures, natural disasters or malicious attacks.
NFR-6	Scalability	It the measure of a system's ability to increase or decrease in performance and cost in response to changes in application and system processing demands and it is one of the main concerns of iot domain