

Project Design Phase - II

Solution Requirements (Functional & Non-functional)

Date	21 OCT 2022
Team ID	PNT2022TMID52223
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	EMAIL: Enter email address PASSWORD: Enter password
FR-2	User Confirmation	Confirmation via Email. Thanks for your email.
FR-3	Log in to system	Serve authenticated content
FR-4	Manage Modules	Manage System Admins Manage Roles of User Manage User permission
FR-5	Check whether condition	Temperature monitoring status Humidity monitoring Status
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	Usability	Usability includes easy understanding and 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 from their production until the decision-making and storage stages.
NFR-3	Reliability	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	Performance	The idea of implementing integrated sensors with sensing soil and environmental parameters in farming will be more efficient.
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 shown that different architectural choices of IoT platforms affect system scalability, real time decision-making is feasible in an environment composed of dozens of thousand.