

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

Date	02 November 2022
Team ID	PNT2022TMID22889
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 email confirmation.
FR-3	Log in to system	Serve your authenticated content
FR-4	Manage Modules	Manage System Admins Manage Roles of Users Manage User permission
FR-5	Check weather conditions	Humidity monitoring status Temperature 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 learning ability, efficiency in use, remember ability, lack of errors in operation and objective 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.
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 feasibility in an environment composed of dozens of thousand.