

Project Design Phase-II

Solution Requirements (Functional & Non-functional)

Date	20 October 2022
Team ID	PNT2022TMID02873
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	EMAIL: Enter email address PASSWORD: Enter password
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
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	Logout	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.