

Project Design Phase-II
Solution Requirements (Functional & Nonfunctional)

Date	15 October 2022
Team ID	PNT2022TMID30597
Project Name	Project – 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	Registration through Form Registration through Gmail
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	Sensor Function for framing System	Measure the Temperature and Humidity Measure the Soil Monitoring Check the cropdiseases
FR-4	Manage Modules	Manage Roles of User Manage User permission
FR-5	Check whether details	Temperature details Humidity details
FR-6	Data Management	Manage the data of weather conditions Manage the data of crop conditions Manage the data of live stock conditions

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	User friendly guidelines for users to avail the features. Most simplistic user interface for ease of use and it includes easy learn ability, efficiency in use, remember ability, lack of errors in operation and subjective pleasure
NFR-2	Security	All the details about the user are protected from unauthorized access. Detection and identification of any misfunctions of sensors. Sensitive and private data must be protected from their production until the decision-making and storage stages
NFR-3	Reliability	Implementing Mesh IoT Networks Building a Multi-layered defence for IoT Networks and This model uses dedicated and shared protection schemes to avoid farm service outages
NFR-4	Performance	The use of modern technology solutions helps to achieve the maximum performances thus resulting in better quality and quantity yields. the idea of implementing integrated sensors with sensing soil and environmental in farming will be more efficient for overall monitoring.
NFR-5	Availability	This app is available for all platforms Then Automatic adjustment of farming equipment made possible by linking information like crops/weather and equipment to auto-adjust temperature, humidity
NFR-6	Scalability	Scalability refers to the ability to increase available resources and system capability without the need to go through a major system redesign or implementation.