Project Design Phase-II

Solution Requirements (Functional & Non-functional)

Date	03oct20022
Team ID	PNT2022TMID48172
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 crop diseases
FR-4	Manage Modules	Manage Roles of User Manage User permission
FR-5	Check weather 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.

NFR 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.
NFR-2	Security	✓ All the details about the user are protected from unauthorized access. ✓ Detection and identification of any misfunctions of sensors.
NFR-3	Reliability	✓ Implementing Mesh IoT Networks ✓ Building a Multi-layered defence for IoT Networks.
NFR-4	Performance	The use of modern technology solutions helps to achieve the maximum performances thus resulting in better quality and quantity yields.
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 refers to the ability to increase available resources and system capability without the need to go through a major system redesign or implementation.