Project Design Phase – II

Solution Requirement (Functional and Non-Functional)

Date	**15 October 2022**
Team ID	**PNT2022TMID15940**
Project Name	**Project – Smart Farmer-IoT Enabled smart FarmingApplication.**
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 conditionsManage 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	Usability includes easy understanding and learn ability, efficiency in use,remember ability, lack oferrors in operation and subjective pleasure.
NFR-2	Security	Sensitive and private data must be protected fromtheir production until the decision-making and storage stages.
NFR-3	Reliability	The shared protection achieves a better trade-offbetween costs and reliability. The model uses dedicated and shared protectionschemes 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.