

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

Date	03 October 2022
Team ID	PNT2022TMID04701
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	Registration through Form Registration through Gmail Registration through LinkedIn
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	Log in to the system	Check the credentials Roles of access
FR-4	Manage the modules	Manage the roles of the Uer and his permission Manage the system's Admin
FR-5	Check the details	Temperature of the soil Humidity and moisture content Minerals and Nutrients the soil lacks
FR-6	Logout	Exit

Non-Functional Requirement:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	It include how easily one can learn to use and system and remember it There shouldn't be any problem while using the system. The User should be happy while using it and be satisfied with the system.
NFR-2	Security	The data collected and stored should be kept safe until the User takes his decision or till the final stage of his cultivation. The data should be not available to anyone without the knowledge of the User.
NFR-3	Reliability	The system should provide shared protection so that there is a trade off between the cost and reliability Also it should avoid farm service outages.
NFR-4	Performance	Sensors can be used to monitor the soil parameters such as its minerals ,nutrient contents,moisture contents,etc and environmental parameters such as humidity and temperature.
NFR-5	Availability	Farming equipments can be made to operate automatically based on the field condition. If the field is dry motor can be automatically switched on to pump water from the well to the field ca
NFR-6	Scalability	Scalability is a major issue in IOT field based on the architecture of the system and it is more important in an environment where it has to make its decision based the problem.