

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

Date	16 October 2022
Team ID	PNT2022TMID08457
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 Gmail Registration through phone number
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP Confirmation via verification link sent to registered mail id
FR-3	Roles and service	Choose roles (ex: farmer, student etc.) Enter the personal details. Choose the type of service or options (ex: irrigation, pest management, crop management etc.)
FR-4	Terms and conditions	Accepts the terms and condition for the chosen role and options
FR-5	Details of farm and plans	Enter the details of farming land and vegetation. Choose the crop you want to plant Choose the types of plans (ex: regular and premium)
FR-6	Details according to farm information	Check the weather information Enter the soil nutrient and pH value Click SAVE Soon the details will share to registered mail Exit

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	A system is built for monitoring the crop field with the help of sensors and automating the irrigation system and helps the farmer to understand the important aspects.
NFR-2	Security	Applications must be designed with the security of their use in mind. This includes personal data and their user's well-being.
NFR-3	Reliability	It allows farmers to maximize yields using minimum resources such as water, fertilizers, seeds etc.
NFR-4	Performance	It increases efficiency and reduce the environmental impacts and to implement technology properly to minimize cost.
NFR-5	Availability	This concept focused on providing the agricultural industry with the infrastructure to leverage advanced technology.
NFR-6	Scalability	It provides the recognition of each object that makes up a solution and ensure communication. The system must remain operational regardless.