

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

Date	19 October 2022
Team ID	PNT2022TMID17368
Project Name	SmartFarmer - 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	Sensor Function farming system	Measure the Temperature and Humidity Measure the soil Monitoring Check the soil levels
FR-4	Manage Modules	Manage Roles of User Manage Sensors
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 levels of water level 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 instructions are provided for users to use the functionalities. Users may utilize it easily and efficiently with a simple user interface.
NFR-2	Security	All of the user's information is encrypted and hidden from unauthorized users. Only by providing the user details, it is possible to manipulate sensors.
NFR-3	Reliability	Since the values of the result will be accurate, this application is trustable and consistent.

NFR-4	Performance	Utilizing contemporary technology solutions helps to maximise performance, producing greater quality and quantity yields. The usage of sensors also aids in understanding the water requirements and other necessities for a higher yield.
NFR-5	Availability	The application is available in the website and mobile app.
NFR-6	Scalability	It refers to the ability to expand resource availability and system capabilities without having to undergo a significant system redesign or implementation.