

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

Date	03 October 2022
Team ID	PNT2022TMID43384
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
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	Log in to Systems	After the confirmation message, system will get login and it will check the credentials.
FR-4	Check credentials	Credentials have been checked and it will make access to manage modules.
FR-5	Manage modules	There will be different modules for different purposes like Managing System Admins, User Administration and Customer permission etc.
FR-6	Status of sensor values	After managing different modules, then we get to look at the state of temperature, humidity, and moisture.
FR-7	Logout	After getting the status, logout or exit the application.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	Instant notification about cultivation, lack of errors due to modern technology and easy to learn for farmers.
NFR-2	Security	The private data about land can be protected from others and it can be accessed by the respective land owners.
NFR-3	Reliability	The reliability in consistency and accuracy have maintained well. This will take care of economic losses and low yields of production.
NFR-4	Performance	The performance and efficiency in overall monitoring was enhanced through the usage of different types of sensors for different parameters and IoT technology.
NFR-5	Availability	The availability of sensors and learning the technology is quite easy. There is possibility in auto adjusting the farming equipment.
NFR-6	Scalability	Scalability in smart farming refers to the adaptability of a system to increase the capacity of farming land. This can be achieved by increasing the use of IoT platforms.