

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

Date	15 October 2022
Team ID	PNT2022TMID35839
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 email Registration through Phone Number
FR-2	User Confirmation	Confirmation through email Confirmation through SMS
FR-3	User Verification	Verification using OTP sent to email Verification using OTP sent to phone
FR-4	User Login	Login using mobile Login using Web
FR-5	User Transaction	Transaction using Web Transaction using Mobile
FR-6	User Experience	Creative and Interactive user friendly UI in Web Creative and Interactive user friendly UI in Mobile

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Performance	The project should take the readings or control information and update the applications with the relevant information quickly which is done using MQTT data transfer providing adequate performance
NFR-2	Availability	The data gathered from the sensors will be available remotely and motor can also be operated remotely with only need for internet connection

NFR-3	Recover	All the code will be saved using GitHub. Here the project files can be stored without the fear of losing them through hardware or software malfunction.
NFR-4	Scalability	The project has scalability where other sensors for analysis and other additions to software can be done without any damage to overall setup
NFR-5	Security	The project has robust security provided using password and user authentication done by OTP
NFR-6	Reliability	Due to robustness of the hardware and fast secure software, data is periodically and correctly obtained. The project is unlikely to fail unless there is some damage in hardware or cables or tampering in the codes which is unlikely thereby providing reliable results