

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

Date	16 October 2022
Team ID	PNT2022TMID44065
Project Name	Project - 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	Log in to system	Check Credentials. Check Roles of Access.
FR-4	Manage Modules	Manage System Admin Manage Roles of User .Manage User permission
FR-5	Check whether details	Temperature details Humidity details Soil moisture details

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	The temperature sensor, humidity sensor, soil moisture sensor and irrigation system(motor) is connected to raspberry pi which is connected to IBM cloud ,the farmer can view temperature ,humidity and soil moisture in his smart phone and can also control irrigation using his smart phone connected to internet
NFR-2	Security	User id and password is provided to farmer to prevent third party access
NFR-3	Reliability	It specifies how likely the system or its element would run without a failure.
NFR-4	Performance	Every 10 seconds to IOT will update sensor parameters to cloud
NFR-5	Availability	Automatic adjustment of farming equipment made possible by linking information like crops/wealth
NFR-6	Scalability	Scalability is another requirement that should be considered in a smart farming platform. Scalability refers to the ability to increase available resources and system capability without the need to go through a major system redesign or implementation.