

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

Date	03 October 2022
Team ID	PNT2022TMID48383
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	Github and slackAccount	Registering the account in both.
FR-2	IBM Account	Registering the account and login in.
FR-3	Node-RED	Creating the account and made the connection.
FR-4	Python	Encode the python code.
FR-5	Open Weather API	Get the data and access the resource.
FR-6	MIT app inventor	Control the motor through the application.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	The mobile application can monitor the temperature, humidity, pressure and soil moisture parameters along with weather forecasting details. Based on these details he can water the crops by controlling the motors through the app and the app gives an alert message if temperature or humidity goes beyond a threshold value.
NFR-2	Security	The system needs the patient to recognize herself or himself using the phone. Any users who make use of the system.
NFR-3	Reliability	It specifies how likely the system or its element would run without a failure.
NFR-4	Performance	The system provides acknowledgment in just one second.The user interface acknowledges

		within five seconds.
NFR-5	Availability	The system is available all the time.
NFR-6	Scalability	Threshold values are set any anomalies will be reported to the farmer. User friendly and efficient . Low cost.