

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

Date	14 October 2022
Team ID	PNT2022TMID32826
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	Reading Temperature	Using RTD (Resistance Temperature Detectors) or Thermistor
FR-2	Identify Humidity and Moisture Level	Hygrometers, are used to measure humidity levels in the atmosphere
FR-3	Transfer the Values	The Temperature and Humidity Values Passed through Sensor Networks
FR-4	IoT Enabled Smart Device	It helps to Monitor the sensor values and useful to operate Motor Pumps through Mobile App.
FR-5	Application	Mobile App Developed through MIT App Inventory For Accessing the Remote Operations

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	Given that it is IoT Enabled Device and Control through Mobile, even those who are with little experience can easily understand it.
NFR-2	Security	It provides assurance that all data transfer inside the system, so it will be secure from virus attacks and unapproved entry.
NFR-3	Reliability	The degree to which the result of a measurement, calculation, or specification can be depended on to be accurate.
NFR-4	Performance	It is easily adoptable, By adding new components with increased functionalities, the existing system can be simply improved
NFR-5	Availability	It protecting the functionality of support systems and ensuring data is fully available at the point in time (or period requirements) when it is needed by our farmers.
NFR-6	Scalability	It is ability of a network to cope with increasing workloads in a cost-effective and sustainable way, by expanding the network's bandwidth capacity and supporting its physical expansion like expanding the Monitoring Vision of Agriculture Field.