

Project Design Phase-II

Solution Resquirements (Functional & Non-functional)

Date	14 October 2022
Team ID	PNT2022TMID17172
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	Measure Temperature	Soil thermometers are the most common tool for measuring soil temperature.The voltage across the diode terminals
FR-2	Measure soil moister	Sensor for soil scanning and water,light,humidity and temperature management
FR-3	Calculating the date and time	Time of day : Between 1 and 2 p.m. Depth :4 inches below the soil surface Soil Location:Same area of field,soil type weather and precipitation
FR-4	Irrigating the soil if needed	A moisture supply for plant growth which also transports essential nutrients. A flow of water to leach or dilute salts in the soil

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	Indicates how effectively and easy users can learn and use a system
NFR-2	Security	Assures all data inside the system or its part will be protected against malware attacks or unauthorised access.
NFR-3	Reliability	The system provides an accurate measurement of data,and it can have a longer lifespan
NFR-4	Performance	The present system can be improved easily by integrating new components with enhanced features
NFR-5	Availability	The proposed product can be available and operable successfully all the time
NFR-6	Scalability	The proposed system is user friendly .The usage of product doesn't require any prior learning