

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

Date	15 October 2022
Team ID	PNT2022TMID47541
Project Name	IoT Based Smart Crop Protection System for Agriculture
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	Software Installation	Installing the software in customer mobile phone
FR-2	Land Enquiry	Enquires land size Enquires type of planting Enquires surroundings Enquires moisture
FR-3	Monitoring Field	Monitors weather Monitors movement of cattle and birds
FR-4	Weather Prediction	Predicts weather using temperature sensor
FR-5	Watering Plant	Watering the plants automatically Watering the plants manually using app Watering the plants using Rain water harvesting Watering the plants using ground water
FR-6	Notification	Sends notification to customer mobile phone

**Non-functional Requirements:**

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

FR No.	Non-Functional Requirement	Description
NFR-1	<b>Usability</b>	People with no understanding of English must be able to use the product
NFR-2	<b>Security</b>	Access permission of the software installed on the customer mobile can only be changed by the customer
NFR-3	<b>Reliability</b>	The software must send notification to the user if any failure occurs in the hardware
NFR-4	<b>Performance</b>	The system should send the notification through internet within 5 seconds
NFR-5	<b>Availability</b>	Adding new sensor to the existing system should not affect the existing sensor
NFR-6	<b>Scalability</b>	The system must be scalable to be implemented up to 20 acres land