

**Solution Requirements (Functional & Non-functional)**

Date	03 October 2022
Team ID	PNT2022TMID11096
Project Name	Project - 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	<b>User Requirements</b>	Crop Protection System Automatic Sprinkler System Monitors Soil Moisture and pH, Humidity and Temperature.
FR-2	<b>User Registration</b>	Manual Registration Registration through webpage Registration through Form Registration through Gmail
FR-3	<b>User Confirmation</b>	Confirmation via Phone Confirmation via Email Confirmation via OTP
FR-4	<b>Payment Options</b>	Cash on Delivery Net Banking/UPI Credit/Debit/ATM Card
FR-5	<b>Product Delivery and Installation</b>	Door Step delivery Take away Free Installation and 1 year Warranty
FR-6	<b>Product Feedback</b>	Through Webpage Through Phone calls Through Google forms

## Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	<b>Usability</b>	Have a clear and self-explanatory manual. Easier to use Even an illiterate farmer have to use the product without any difficulties
NFR-2	<b>Security</b>	Application has to be secured with 2 step authorisation Passwords and passkeys will be assigned as per the users need.
NFR-3	<b>Reliability</b>	Hardware requires a regular checking and service Software may be updated periodically Immediate alert is provided in case of any system failure
NFR-4	<b>Performance</b>	The application must have a good user interface It should have a minimal energy requirement It has to save water and energy
NFR-5	<b>Availability</b>	All the features will be available when the user requires. It depends on the need of the farmer and the customization the user has done.
NFR-6	<b>Scalability</b>	The product has to cover all the space of land irrespective of the size or area of a farm field.