

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

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| Date | 13 October 2022 |
| Team ID | PNT2022TMID11029 |
| Project Name | Project - lot Based Smart Crop Protection System |
| 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 | User Requirements | Crop Protection Automatic Sprinkler System Monitors Soil Moisture ,Humidity and Temperature |
| FR-2 | User Registration | Manual Registration Registration through webpage Registration through Form Registration through Gmail |
| FR-3 | User Confirmation | Confirmation via Phone Confirmation via Email Confirmation via OTP |
| FR-4 | Payment Options | Cash on Delivery Net Banking/UPI Credit/Debit/ATM Card |
| FR-5 | Product Delivery and Installation | Door Step delivery Take away Free Installation and 1 year Warranty |
| FR-6 | Product Feedback | 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 | Usability | Have an easy-to-understand guidebook. simpler to use The product is easy to use even by farmers who are illiterate |
| NFR-2 | Security | Application security requires two-step authorization. Passwords and passkeys will be given out based on the needs of the users. |
| NFR-3 | Reliability | Hardware needs to be checked and maintained regularly. Periodic software updates are possible. Any system breakdown will result in an immediate alarm. |
| NFR-4 | Performance | The programme needs a good user interface. It should just demand a small amount of energy. It must conserve energy and water. |
| NFR-5 | Availability | Every function will be accessible whenever the user needs it. It depends on the farmer's requirements and the level of customization the user has undertaken |
| NFR-6 | Scalability | Regardless of the size or area of a farm field, the product must cover the entire area of the ground. |