# Project Design Phase-II

## Solution Requirements (Functional & Non-functional)

| Date | 15 October 2022 |
|---|---|
| Team ID | PNT2022TMID11102 |
| 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 | **User Requirements** | Crop Protection System, Automatic Irrigation System, Monitors the Soil Moisture, Monitors the field through Mobile app. |
| FR-2 | **User Registration** | Registration through Gmail, Registration through Form, Registration through website, |
| FR-3 | **User Confirmation** | Confirmation via Email Confirmation via OTP |
| FR-4 | **Payment Options** | Bank Transfer, Cash on Delivery, Online Payments, Credit Card / Debit Card. |
| FR-5 | **Product Delivery and Installation** | Door Step delivery,Take away, Free Installation with 1 year Warranty. |
| FR-6 | **Product Feedback** | Through Website, Through Google forms and Through Email. |

## Non-functional Requirements:

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

| FR No. | Non-Functional Requirement | Description |
|---|---|---|
| NFR-1 | **Usability** | Usage is effective, Product information will be provided clearly, Products can be used without any complications and it is easy to use. |
| NFR-2 | **Security** | Application is secured with Two step Verification, Passwords and patterns will be assigned as per the user requirements they needed. Cloud data includes in the network. |
| NFR-3 | **Reliability** | Hardware requires a regular and frequent check and Software Service is Periodically Updated. |
| NFR-4 | **Performance** | The application has a well user interface, Energy requirement is less. |
| NFR-5 | **Availability** | The features will be available at the user required time. It depends on the need of the farmer and the Customization of the the user. |
| NFR-6 | **Scalability** | The product has to cover all the space of a farm field and it is user and eco-friendly in nature. |