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

| Date | 15 October 2022 |
|---------------|--|
| Team ID | PNT2022TMID11119 |
| 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 | User Requirements | The Crop Protection Automatic Sprinkler System Tracks Temperature, Humidity, and Soil Moisture |
| FR-2 | User Registration | Registration Manual Registration using a website Form-based registration Gmail-based registration |
| FR-3 | User Confirmation | Phone confirmation Email confirmation required Reassurance via OTP |
| FR-4 | Payment Options | On delivery of cash Net Banking, UPI Cards, Credit Cards, and ATMs |
| FR-5 | Product Delivery and Installation | Door-to-door delivery Take out Totally free installation and a 12-month warranty |
| FR-6 | Product Feedback | via a website Using Google forms and phone calls |

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. The user's needs will determine how passwords and passkeys are assigned. |
| 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. |