**Project Design Phase-II**

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

|  |  |
| --- | --- |
| Date | 03 October 2022 |
| Team ID | PNT2022TMID52627 |
| Project Name | Project – 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 Registration | Registration through Form  Registration through Gmail |
| FR-2 | User Confirmation | Confirmation via Email  Confirmation via OTP |
| FR-3 | Sensor Function for framing System | Measure the Temperature and Humidity  Measure the Soil Monitoring Check the crop  diseases |
| FR-4 | Manage Modules | Manage Roles of User  Manage User permission |
| FR-5 | Check details | Temperature details  Humidity details |
| FR-6 | Data Management | Manage the data of weather conditions  Manage the data of crop conditions  Manage the data of live stock conditions |

**Non-functional Requirements:**

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

|  |  |  |
| --- | --- | --- |
| **FR No.** | **Non-Functional Requirement** | **Description** |
| NFR-1 | **Usability** | User friendly guidelines for users to avail the features.  Most simplistic user interface for ease of use. |
| NFR-2 | **Security** | All the details about the user are protected from unauthorized access.  Detection and identification of any misfunctions of sensors. |
| NFR-3 | **Reliability** | Implementing Mesh IoT Networks  Building a Multi-layered defence for IoT Networks. |
| NFR-4 | **Performance** | The use of modern technology solutions helps to achieve the maximum  performances thus resulting in better quality and quantity yields. |
| NFR-5 | **Availability** | This app is available for all platforms |
| NFR-6 | **Scalability** | Scalability refers to the ability to increase available resources and system  capability without the need to go through a major system redesign or  implementation. |