**Project Design Phase-II**

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

| Date | 28 October 2022 |
| --- | --- |
| Team ID | **PNT2022TMID42723** |
| Project Name | Project - SmartFarmer - 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 | Security and Privacy | IoT device limited capacity and ability led to complex encryption algorithms |
| FR-2 | Reliability | New materials and technologies need to continue to be studied to improve the durability of devices. |
| FR-3 | Interference | IoT networks that use cognitive technology to reuse unlicensed spectra increase the cost of the device |
| FR-4 | Real time | IoT applications in connected agriculture employ a multitude of sensors for gathering real-time data. |

**Non-functional Requirements:**

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

| **FR No.** | **Non-Functional Requirement** | **Description** |
| --- | --- | --- |
| NFR-1 | **Usability** | Increased production |
| NFR-2 | **Security** | IoT device limited capacity |
| NFR-3 | **Reliability** | Technologies need to continue to be studied |
| NFR-4 | **Performance** | Iot can also perform a vast number of tasks that previously required human labor |
| NFR-5 | **Availability** | IoT technologies enables growers and farmers to reduce waste and enhance productivity |
| NFR-6 | **Scalability** | Decision-making tools, services, and software are integrated seamlessly to help farmers |