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

| Date | 15 October 2022 |
| --- | --- |
| Team ID | PNT2022TMID49483 |
| Project Name | Project – 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 | **IoT devices** | Sensors and Wifi module. |
| FR-2 | **Software** | Web UI, Node-red, IBM Watson, MIT app |

**Non-functional Requirements:**

| **FR No.** | **Non-Functional Requirement** | **Description** |
| --- | --- | --- |
| NFR-1 | **Usability** | •High productivity  •Less time consumption  •Easy to learn |
| NFR-2 | **Security** | Sensitive and private data must be protected from their production untill the decision making and storage stages |
| NFR-3 | **Reliability** | Accuracy of data and hence it is Reliable. |
| NFR-4 | **Performance** | The idea of implementing the integrated sensors with sensing soil and environmental or ambient parameters in farming will be more efficient for overall monitoring |
| NFR-5 | **Availability** | Automatic adjustment of farming equipment made possible by linking information like crops, weather and equipment to auto adjust temperature, humidity, watering crops,etc. |
| NFR-6 | **Scalability** | Scalability is a major concern for IoT platforms.  It has shown that different architectural choices of IoT platforms affect system scalability and that automatic real time decision making is feasible in an environment composed of dozens of thousands. |