

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

|               |                                                      |
|---------------|------------------------------------------------------|
| Date          | 14 October 2022                                      |
| Team ID       | PNT2022TMID04753                                     |
| 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 | Timely Updated with proper network connection | The notifications shown to the farmers with respect to the information gathered from various sensors must be an updated version with respect to time. The farmers will get information simultaneously after getting updated. |
| FR – 2 | User Understandable                           | The information displayed to the farmers must be understandable in terms of the words that are being used.                                                                                                                   |
| FR – 3 | Distinct visibility                           | The information should be quite large for the users to read clearly. The sensor values and the words used must be of appropriate size, so that it will be clear to the farmers.                                              |

**Non-Functional Requirements:**

Following is the Non-Functional Requirements of the proposed solution

| FR No.  | Non-Functional Requirements | Description                                                                                                              |
|---------|-----------------------------|--------------------------------------------------------------------------------------------------------------------------|
| NFR – 1 | <b>Reliability</b>          | The notifications of the sensor values should display correct and errorless information.                                 |
| NFR – 2 | <b>Security</b>             | The information should be made secure so that it could not be manipulated by any other person.                           |
| NFR – 3 | <b>Usability</b>            | The information must be able to update whenever and wherever required                                                    |
| NFR – 4 | <b>Performance</b>          | The system should be able to update itself properly at times of fatal conditions and provide necessary driving measures. |

|         |                     |                                                                                                            |
|---------|---------------------|------------------------------------------------------------------------------------------------------------|
| NFR – 5 | <b>Availability</b> | The system must be made available 24/7 in order to provide uninterrupted service to the farmer.            |
| NFR – 6 | <b>Scalability</b>  | The system should be compatible with the developed specifications and also be open for future upgradations |