

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

|               |   |
|---------------|---|
| Date          | 15 October 2022   |
| Team ID       | PNT2022TMID11451  |
| Project Name  | Project – Smart Farmer-IoT Enabled smart Farming Application. |
| Maximum Marks | 4 Marks   |

**Functional Requirements:**

| FR No. | Functional Requirement (Epic)      | Requirement for a supporting story or task   |
|--------|------------------------------------|--|
| FR-1   | User Registration                  | Utilizing a Form for Registration signing up with Gmail  |
| FR-2   | User Confirmation                  | Email confirmation required<br>Reassurance through OTP   |
| FR-3   | Sensor Function for framing System | Take temperature and humidity readings.<br>Monitoring the Soil Measurement Look into crop diseases.                                  |
| FR-4   | Manage Modules                     | Manage User Roles<br>controlling user permission   |
| FR-5   | Check whether details              | temperature<br>information<br>Humidity<br>information  |
| FR-6   | Data Management                    | Organize the information about the weather<br>Control the agricultural conditions data.<br>control the live stock circumstances data |

### Non-functional Requirements:

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

| FR No. | Non-Functional Requirement | Description   |
|--------|----------------------------|---|
| NFR-1  | <b>Usability</b>           | <ul style="list-style-type: none"><li>✓ User friendly guidelines for users to avail the features.</li><li>✓ Most simplistic user interface for ease of use.</li></ul>                           |
| NFR-2  | <b>Security</b>            | <ul style="list-style-type: none"><li>✓ All the details about the user are protected from unauthorized access.</li><li>✓ Detection and identification of any misfunctions of sensors.</li></ul> |
| NFR-3  | <b>Reliability</b>         | <ul style="list-style-type: none"><li>✓ Implementing Mesh IoT Networks</li><li>✓ Building a Multi-layered defence for IoT Networks.</li></ul>   |
| NFR-4  | <b>Performance</b>         | The use of modern technology solutions helps to achieve the maximum performances thus resulting in better quality and quantity yields.  |
| NFR-5  | <b>Availability</b>        | This app is available for all platforms   |
| NFR-6  | <b>Scalability</b>         | Scalability refers to the ability to increase available resources and system capability without the need to go through a major system redesign or implementation.                               |