

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

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|---------------|---|
| Date | 15 October 2022 |
| Team ID | PNT2022TMID48581 |
| 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 | 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 whether 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. |