

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

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| Team ID | PNT2022TMID02463 |
| 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 | User Registration | Registration through Gmail |
| FR-2 | User Confirmation | Confirmation via Email Confirmation via OTP |
| FR-3 | Log in to system | Check Roles of Access. Check Credentials |
| FR-4 | Manage Modules | Manage System Admins Manage Roles of User Manage User permission |
| FR-5 | Check whether details | Temperature details Humidity details |
| FR-6 | Log out | Exit |

Non-functional Requirements:

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

| FR No. | Non-Functional Requirement | Description |
|--------|----------------------------|--|
| NFR-1 | Usability | Usability is defined as the ability to learn quickly, use something effectively, remember something, operate something without making a mistake, and enjoy something. |
| NFR-2 | Security | Private and confidential information must be kept secure at all times, including during collection, processing, and storage. |
| NFR-3 | Reliability | A superior cost-to-reliability trade-off is achieved with shared protection. To prevent agricultural service interruptions, the approach employs specialised and shared protection methods. |
| NFR-4 | Performance | It will be more effective to monitor farming operations overall if integrated sensors are used to measure soil and ambient characteristics. |
| NFR-5 | Availability | By tying information about crops, weather, and equipment together, it is feasible to automatically alter temperature, humidity, and other factors in farming equipment. |

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| NFR-6 | Scalability | For IoT platforms, scalability is a big challenge. It has been demonstrated that different IoT platform architectural decisions impact system scalability and that automatic real-time decision-making is possible in a setting with thousands of users. |
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