VSB ENGINEERING COLLEGE, KARUR-639111 PROJECT DESIGN PHASE-2

Project Title: Smart Farmer- IoT Enabled Smart Farming Application

Project Domain: Internet of Things

Solution Requirements (Functional & Non-functional)

| Team ID | PNT2022TMID3347 6 |
|---------------|-------------------------------------|
| Project Name | Project – IOT ENABLED SMART FARMING |
| | APPLICATION SYSTEM. |
| 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 | As a user Registration through Gmail |
| FR-2 | User Confirmation | As a user Confirmation via Email then generate the Confirmation via OTP |
| FR-3 | Log in to system | Once confirmation message received after login the system and Check Credentials |
| FR-4 | Check Credentials | Once check the credentials after go to the Manage modules. |
| FR-5 | Manage modules | In this manage modules described the below functions like Manage System Admins Manage Roles of User Manage User permission and etc |
| FR-6 | Logout | Then check Temperature, humidity and moisture after then logout or exist the application. |

Non-functional Requirements:

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

| FR No. | Non-Functional Requirement | Description |
|--------|----------------------------|--|
| NFR-1 | Usability | Usability includes easy learn ability, efficiency in use, remember ability, lack of errors in operation and subjective pleasure. |
| NFR-2 | Security | Sensitive and private data must be protected from their production until the decision-making and storage stages. |
| NFR-3 | Reliability | The shared protection achieves a better trade-off between costs and reliability. The model uses dedicated and shared protection schemes to avoid farm service outages. |

| NFR-4 | Performance | the idea of implementing 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, etc. |
|-------|--------------|--|
| NFR-6 | Scalability | scalability is a major concern for IoT platforms. It has been 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 thousand. |