**Project Design Phase-II**

**Solution Requirements (Functional & Non-functional)**

|  |  |
| --- | --- |
| Date | 13 October 2022 |
| Team ID | PNT2022TMID44926 |
| 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 | * The system must allow the user to register by leaving their email |
| FR-2 | User Confirmation | * The system must send a confirmation email to the User |
| FR-3 | User Login | * The system must allow the registered user to login by using their email |
| FR-4 | Dashboard | * The system will show the apps features in the dashboard to the user |
| FR-5 | Weather Monitoring | * The system shall provide the following weather parameters: Temperature , pressure, Wind speed & direction , rain fall and humidity . |
| FR-6 | Motor Controls | * The system must provide when user give the Motor ON command then the system provide Motor ON to the User * The system must provide when user give the Motor OFF command then the system provide Motor OFF to the User |
| FR-7 | User feedbacks | * The system must allow the user to submit the feedback through a contact in the application |

**Non-functional Requirements:**

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

|  |  |  |
| --- | --- | --- |
| FR No. | Non-Functional Requirement | Description |
| NFR-1 | Usability | * An user friendly and simple web application . * It is simply used by the help of tutorials . |
| NFR-2 | Security | * Only registered person can access the web application. * User can only share the data to another,no one can stolen their data. * Data’s are more secured. |
| NFR-3 | Reliability | * If a data collection is slow for user it will check immediately to resolve that problem. * Provide accuracy of data to the user |
| NFR-4 | Performance | * Fast to monitoring the field * It is used to turn on /turn off the motor within a second * It shows the values of temperature , humidity , weather conditions at every time. |
| NFR-5 | Availability | * Every where at any time available on the web application. * It can be found on search engines like google,youtube etc…. |
| NFR-6 | Scalability | * It can be multiple command is given to act at a time it perform priority based. * Reduced traffic in case of multiple user interaction |