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

| Date | 17 October 2022 |
|---------------|--|
| Team ID | PNT2022TMID17315 |
| 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 |