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

| Date | 18-11-2022 |
|---------------|--|
| Team ID | PNT2022TMID11788 |
| 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) |
|--------|-------------------------------|---|
| 1 | User Registration | Registration Through Gmail |
| 2 | User Confirmation | Confirmation Via Email Confirmation Via OTP |
| 3 | User Login | Login with Email Id and Password |
| 4 | Forgot Password | Login with Email Confirmation Of OTP |
| 5 | Query Form | Make a note of the problems and issues faced by user when using the application |
| 6 | Weather | To find the climate information of a particular area |
| 7 | Agro Note | To list of agriculture related information like how to plant, how much litres of water that plant need in a day etc |
| 8 | Sensors | To show various data from different sensors like temperature, humidity, soil moisture |
| 9 | Database Management | To show various agriculture related data are stored |
| 10 | Exit | After user checked every information, user can exit the application |

Non-functional Requirements:

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

| FR No. | Non-Functional Requirement | Description |
|--------|----------------------------|--|
| 1 | Usability | Effective and Easy to Use |
| 2 | Security | The process of protecting data from Unauthorized Access |
| 3 | Reliability | Consistency and Accuracy and the shared protection achieves a better trade-off between costs and reliability |
| 4 | Performance | Measured and estimate the performance of the Productivity |
| 5 | Availability | 24/7 services |
| 6 | Scalability | Scalability is main concern for IoT platforms. It supports third party sensors. It can be easily scalable for large farming. |