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

| Date | 14 October 2022 |
|---------------|--------------------------------|
| Team ID | PNT2022TMID50396 |
| 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 | Functional Requirement | Sub Requirement (Story / Sub-Task) |
|------|-------------------------------|--|
| No. | (Epic) | |
| FR-1 | Basic Requirements | Smart Phone with minimum 2GB RAM & 8GB ROM |
| FR-2 | User Registration | Registration through Email |
| | | Registration through Form |
| | | Registration through Mobile Number |
| FR-3 | User Confirmation | Confirmation via Email Confirmation |
| | | via OTP |
| FR-4 | Access Permission | User should enable their Audio, Contacts, |
| | | Location, Wi-Fi & Camera |
| FR-5 | User Details | Name, Mobile Number, Email-id, Address, |
| | | Type of crop, Land details etc |

Non-functional Requirements:

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

| FR | Non-Functional | Description |
|-----|----------------|-------------|
| No. | Requirement | |

| NFR- 1 | Usability | Can be used in all agricultural fields. Can be Monitor their field from anywhere at any time. Irrigation can be easily done to all crops at regular time intervals. |
|-----------|--------------|---|
| NFR-2 | Security | Confidentiality-Requires information in a computer only be accessible for reading by authorized parties. Access be available only to authorized users. All the details about the user are protected from unauthorized access. Detection and identification of any misfunctions of sensors. |
| NFR-3 | Reliability | O High speed of data results in better monitoring. O Efficient of the system consisting for a long period of time. O Cost effective. O Easily Accessible by the users. |
| NFR- 4 | Performance | O The idea of implementing integrating sensors with soil sensing and environmental or ambient parameters in farming will be more efficient for overall monitoring. |
| NFR- 5 | Availability | Information about Water, Crop conditions, Soil and Weather are available through the use of sensors which is linked to the cloud and can be accessible via Application or Website. Application can be available in play stores. |

| NFR- | Scalability | O Business to business and business |
|------|-------------|--------------------------------------|
| 6 | | to customer can be implemented |
| | | and it can be used for enhancing the |
| | | profit in large scale. |