**Project Design Phase-II**

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

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| Date | 14 October 2022 |
| Team ID | PNT2022TMID30034 |
| Project Name | Project – Smart Farmer-IOT Enabled Smart Farming Application. |
| Maximum Marks | 4 Marks |

**Functional Requirements:**

Following are the functional requirements of the proposed solution.

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| **FR No.** | **Functional Requirement (Epic)** | **Sub Requirement (Story / Sub-Task)** |
| 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.

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| **FR No.** | **Non-Functional Requirement** | **Description** |
| 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** | * High speed of data results in better monitoring. * Efficient of the system consisting for a long period of time. * Cost effective. * Easily Accessible by the users. |
| NFR-4 | **Performance** | * 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-6 | **Scalability** | * Business to business and business to customer can be implemented and it can be used for enhancing the profit in large scale. |