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

| Date | 15 October 2022 |
|------|-----------------|
| Team ID | PNT2022TMID49537 |
| 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 collects the real time data | ● The user collects the real time data to identify the exact weather condition. |
| FR-2 | Sensors fixed in land | ● The data is collected from the sensors. |
| FR-3 | Store the Data | ● The data stored in the cloud. |
| FR-4 | Notification | ● Once the motion or drought is detected it is notified through the message and water flow. |

**Non-functional Requirements:**

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

| NFR No. | Non-Functional Requirement | Description |
|---------|----------------------------|-------------|
| NFR-1 | **Usability** | ● Fertile land can only be used for agricultural purposes. To use it for residential, commercial or industrial purposes. |
| NFR-2 | **Security** | ● Agricultural security areas are a tool for protecting our farms and farmland from non agricultural uses. These security areas are reevaluated every seven years. |
| NFR-3 | **Reliability** | ● The policymakers have to use proxy indicators like production estimates and prices to arrive at average incomes for the base year. |
| NFR-4 | **Performance** | ● The Performance of the Indian economy is dependent upon the growth of the agricultural sector. In 2021 India will be the world's second largest food producer. |
| NFR-5 | **Availability** | ● The application gives alerts and live feeds 24/7. |
| NFR-6 | **Scalability** | ● Multiple cropping can increase production and income scalability can be measured by increased crop diversity, reduced use of inorganic fertilizers and pesticides. |