# Project Design Phase-II

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

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| Date | 27 October 2022 |
| Team ID | PNT2022TMID48844 |
| Project Name | 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 | User Registration | Registration through Form Registration through email  Registration through LinkedIn |
| FR-2 | User Confirmation | Confirmation via Email Confirmation via OTP |
| FR-3 | Sensor Function farming system | Measure the Temperature and Humidity Measure the soil Monitoring  Check the soil levels |
| FR-4 | Manage Modules | Manage Roles of User Manage Sensors |
| FR-5 | Check Weather details | Temperature details humidity details |
| FR-6 | Data Management | Manage the data of weather conditions Manage the data of crop conditions  Manage the levels of water level conditions |

**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** | User-friendly instructions are provided for users to use the functionalities.  Users may utilize it easily and efficiently with a simple user interface. |
| NFR-2 | **Security** | All of the user's information is encrypted and hidden from unauthorized users.  Only by providing the user details, it is possible to manipulate sensors. |

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| NFR-3 | **Reliability** | Since the values of the result will be accurate, this application is trustable and consistent. |

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| NFR-4 | **Performance** | Utilizing contemporary technology solutions helps to maximize performance, producing greater quality and quantity yields. The usage of sensors also aids in understanding the water requirements and other  necessities for a higher yield. |
| NFR-5 | **Availability** | The application is available in the website and mobile app. |
| NFR-6 | **Scalability** | It refers to the ability to expand resource availability and system capabilities without having to undergo a  significant system redesign or implementation. |