# Project Design Phase-II

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

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| Date | 15 November 2022 |
| Team ID | PNT2022TMID48496 |
| Project Name | Smart Farmer – IOT Enabled Smart Farming Application |
| Maximum Marks | 4 Marks |

# Functional Requirements:

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| **FR No.** | **Non-Functional Requirement** | **Description** |
| NFR-1 | **Usability** | The dashboard needs to be clear, uncluttered, and adaptable. |
| NFR-2 | **Security** | Authentication - The user have a private dashboard for secured access. |
| NFR-3 | **Reliability** | High-quality sensors were employed to provide long-lasting high precision and accuracy. |
| NFR-4 | **Performance** | Performance can be enhanced by employing efficient sensors and developing efficient code. |

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 gmail/Mobile Application Via wifi |
| FR-2 | User Confirmation | Confirmation via Email Confirmation via OTP |
| FR-3 | Authentication | Using PIN authentication to carry out some delicate app operations. |
| FR-4 | Cloud Database | Database service on cloud |
| FR-5 | Cloud Connectivity | Connecting Hardware to cloud |

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| FR-6 | Exporting Reports | Allowing users to export their yearly, monthly, weekly status. |

# Non-functional Requirements:

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

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| NFR-5 | **Availability** | The programme allows for control and monitoring at any time and from any location, depending on the farmer's comfort level. |
| NFR-6 | **Scalability** | The application, which can be used for many different kinds of crops in the field, can be upgraded in the future. |