Project Design Phase-II

Solution Requirements (Functional & Non-functional)

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| Date | 03 October 2022 |
| Team ID | PNT2022TMID08726 |
| 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 Phone number  Registration through Gmail |
| FR-2 | User Confirmation | Confirmation via Email  Confirmation via OTP |
| FR-3 | IoT Kit | ESP 8266(Wi-Fi module), Sensors, Solenoid value |
| FR-4 | Sensors | Tensiometer, BMP280, Acoustic sensor, RS-PH-N01-TR-1, Camera. |
| FR-5 | Power supply | Switched Mode Power supply (SMPS) |

# 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** | Soil and water management, crop health monitoring. |
| NFR-2 | **Security** | It has user authentication. |
| NFR-3 | **Reliability** | Made of reliable components and IoT protocols. |
| NFR-4 | **Performance** | The project has very high performance. |
| NFR-5 | **Availability** | IoT kits we used are available in the market. |