**Project Design Phase-II**

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

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| Date | 17 November 2022 |
| Team ID | PNT2022TMID20858 |
| 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 Gmail  Registration by creating a new user name and password |
| FR-2 | User Confirmation | Confirmation via Email  Confirmation via OTP |
| FR-3 | User login | Login using the credentials we have used during registration |
| FR-4 | User permission | **Smart Farming with IoT** relies increasingly on smart technology for the management of agricultural enterprises. And it does so in order to increase the quality and quantity of the products. |
| FR-5 | Using the intelligent system | IoT and AI solutions can get integrated into autonomous tractors to help collect real-time data about soil health, including water levels, temperature, and weather. |

**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** | It is very user friendly, any people with less knowledge also can easily understand.Remote Management. With farms being located in far-off areas and distant lands, farmers enable this for better solution. |
| NFR-2 | **Security** | Smart farming, which involves the application of sensors and automated irrigation practices, can help monitor agricultural land, temperature, soil moisture, etc. This would enable farmers to monitor crops from anywhere. |
| NFR-3 | **Reliability** | It has good consistency and Accuracy as it actively helps farmers to better understand the important factors such as water level,weather,humidity and soil mositure. |
| NFR-4 | **Performance** | The performance of smart farming is high and it is very efficient as it is very easy to understand and has a high security and scalability. |
| NFR-5 | **Availability** | This smart farming is enabled at any system like laptop , mobile phone , desktop, Gis and user friendly. |
| NFR-6 | **Scalability** | smart farming refers to the adaptability of a system to increase the capacity,the number of technology devices such as sensors and actuators, while enabling timely analysis. |