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

Date	13 October 2022
Team ID	PNT2022TMID46164
Project Name	Project – Smart Farmer – IoT Enabled Smart Farming Application
Maximum Marks	4 Marks

Functional Requirements:

Following are the functional requirements of the proposed solution.

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	It is very user friendly, any people with less knowledge also can easily understand as it is 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, water level, humidity and weather. This would enable farmers to monitor crops from anywhere.

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.

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 moisture.
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.