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

Date	19 October 2022
Team ID	PNT2022TMID24104
Project Name	Smart Farmer -IOT Enabled Smart Farming Application
Maximum Marks	4 Marks

Functional Requirements:

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Registration	As a user, sign up using Gmail
FR-2	User Confirmation	After login, Credentials are Check
FR-3	Check Credentials	Once check the credentials after go to the Dashboard.
FR-4	Sensor function	Measure Temperature, humidity and soil moisture.
FR-5	Dashboard	Temperature Details Humidity Details Soil Moisture Details Motor ON/OFF Function
FR-6	Logout	When user clicked the log out button the user will be signed out.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	Simplicity in accessing the details of temperature sensor measure, humidity sensor measure and weather conditions by the farmer. Easy controlling of the motor and irrigation system through application.
NFR-2	**Security**	Only the authenticated user can access the irrigation system and monitor the crop. Information of one user will not be shared to the other user or any other persons.
NFR-3	**Reliability**	This crop monitoring, Irrigation control and weather monitoring results in better trade-off between cost and

		reliability. It reduces time and yields more profit to the farmers.
NFR-4	**Performance**	The concept of integrating sensors with environment, soil and farming parameters will be more efficient for overall supervision.
NFR-5	**Availability**	The details of all the sensors will be displayed in the application at any time.
NFR-6	**Scalability**	Scalability is an important for IOT platforms. It has been demonstrated that different architectural choices of IoT platforms affect system scalability and that automatic real -time decision making is possible in an environment composed of thousands of devices.