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

Date	19 October 2022
Team ID	PNT2022TMID16870
Project Name	SmartFarmer - IoT Enabled Smart Farming Application
Maximum Marks	4 Marks

Functional Requirements:

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	User-friendly instructions are provided for users to use the functionalities. Users may utilize it easily and efficiently with a simple user interface.
NFR-2	**Security**	All of the user's information is encrypted and hidden from unauthorized users. Only by providing the user details, it is possible to manipulate sensors.

NFR-3	**Reliability**	Since the values of the result will be accurate, this application is trustable and consistent.

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Registration	Registration through Form Registration through Gmail Registration through LinkedIn
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	Sensor Function farming system	Measure the Temperature and Humidity Measure the soil Monitoring Check the soil levels
FR-4	Manage Modules	Manage Roles of User Manage Sensors
FR-5	Check Weather details	Temperature details Humdity details
FR-6	Data Management	Manage the data of weather conditions Manage the data of crop conditions Manage the levels of water level conditions

Non-functional Requirements:

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

NFR-4	**Performance**	Utilizing contemporary technology solutions helps to maximise performance, producing greater quality and quantity yields. The usage of sensors also aids in understanding the water requirements and other necessities for a higher yield.
NFR-5	**Availability**	The application is available in the website and mobile app.
NFR-6	**Scalability**	It refers to the ability to expand resource availability and system capabilities without having to undergo a significant system redesign or implementation.