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

Date	03 October 2022
Team ID	PNT2022TMID35659
Project Name	SmartFarmer - 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	Registration through Gmail Create an username and password
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	User Log in	Checking for valid user credentials
FR-4	Sensor values	View the values provided by different types of sensors such as humidity, moisture, pH,…
FR-5	Manage motors and sprinklers	Automatically operate the switches of motors and sprinklers whenever required
FR-6	Log out	Exit

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	It is very user friendly. People with less knowledge can also easily understand. Remote Management. With farms being 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 understand better about 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 high security and scalability.
NFR-5	**Availability**	This smart farming is enabled at any system like laptop, mobile phone, desktops and is very 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