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

Date	17-10-2022
Team ID	PNT2022TMID04663
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	Registration through Form Registration through Gmail
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	Sensor Function for farming system	Measure the Temperature and Humidity Measure the Soil Monitoring Check the soil nutrient levels
FR-4	Manage Modules	Manage Roles of User Manage User permission
FR-5	Check weather details	Temperature details Humidity details
FR-6	Data Management	Manage the data of weather conditions Manage the data of crop conditions Manage the data of water level conditions

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	User friendly guidelines for users to avail the features. Simple user interface for users to use it effectively without any difficulties.
NFR-2	**Security**	All the details about the user are encrypted and is made unavailable to unauthorized users. Detection and identification of any malfunctions of sensors.
NFR-3	**Cost**	IoT based smart farming application can be made at low cost with limited but most efficient features or it can be made with wide range of features depending upon the user requirement.
NFR-4	**Performance**	The use of modern technology solutions helps to achieve the maximum performances thus resulting in better quality and quantity yields. Also the use of sensors helps in knowing about the water and other essentials requirements needed for the better yield.
NFR-5	**Availability**	The application is available in all platforms
NFR-6	**Scalability**	It refers to the ability to increase available resources and system capability without the need to go through a major system redesign or implementation.