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

Date	26 October 2022
Team ID	PNT2022TMID31166
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 MIT App or other user interface applications which are being prescribed.
FR-2	User Control	• Control through device through MIT app or other user interface.
FR-3	Physical parameters	• Soil Moisture, Humidity and physically varying environmental factors.
FR-4	Internet Connectivity	• Allocating a separate spectrum of low band wifi modules to ensure sustainable connectivity. • Checking the internet connection periodically. • Speed of the internet.
FR-5	Monitoring	• Displaying the values of soil moisture, temperature, humidity and other physical parameters.
FR-6	Output	• Checking the output at the farmland conditions.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	It is used in agricultural activities to scale up the productivity with optimal usage of resources.
NFR-2	**Security**	It will be able to monitor farmland conditions at any time in any geographical locations.
NFR-3	**Reliability**	It is reliable in all the environmental conditions.
NFR-4	**Performance**	It will perform accurately and give results according to the user handling of device.
NFR-5	**Availability**	It is applicable to all geographical locations and user friendly to handle.

NFR-6	**Scalability**	This model able to detect adaptively according to the environmental conditions by the use of sensors and change the output and is adaptive to every farmland characteristics.