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

Date	03 October 2022
Team ID	PNT2022TMID51485
Project Name	Project – IOT Based Smart Crop Protection System
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	Install the APP signing with g-mail or phone number Creating a profile
FR-2	User Confirmation	Verification via Email or phone number
FR-3	User Visibility	Sense animals entering the crop field & sounds alarm and send SMS to the farmer using cloud services
FR-4	User Reception	The data's are like values of temperature ,fire detection are received via SMS.
FR-5	User Action	The user needs to take action like sprinkling water to crop,making sound get away the animals from crops scheduled planting operation

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	Mobile support user must able to interact in the same role & task on computer &mobile devices
NFR-2	**Security**	It helps to prevent from crops loss and human injuries. Data requires secure access to must register and communicate securely on devices and authorized user of the system
NFR-3	**Reliability**	It has a capacity to recognize the disturbance near the field and doesn't give a false caution signal
NFR-4	**Performance**	It must provide acceptable response time to user regardless of the volume of data that is stored and the analytics that occurs in background
NFR-5	**Availability**	It is not a critical production application which means that operation or production do not go down It is highly available as 24*7 operation
NFR-6	**Scalability**	System must handle expanding load & data retention needs that are based on the upscaling of the solution scope.