

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

Date	20-10 2022
Team ID	PNT2022TMID32051
Project Name	Project – IOT Based Smart Crop Protection System For Agriculture
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 up with Gmail or phone numbers. Creating a new profile. Understand the guidelines which we given
FR-2	User Confirmation	Email or phone number verification required via OTP.
FR-3	Accessing datasets	The data like values of temperature, data sensor, humidity, soil moisture are received by alert SMS.
FR-4	Interface sensor	Connect the sensor and the application When animals enter the field, the alarm is generated.
FR-5	User action	The user needs to take action like detecting through crop rotation, fertilizer, strip cropping.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	This project's contributors to the farm protection through the smart protection system and use new technologies and also increase the quality of its crop.

NFR-2	Security	It was created to protect the crops from animals.
NFR-3	Reliability	Farmers are able to safeguard their lands by help of this technology. They get some good benefits from higher crop yields.
NFR-4	Performance	When animals attempt to enter the crop field, IOT devices and sensors alert the farmer via message and maintain good yields.
NFR-5	Availability	Agriculture fences are quite an effective wild animal protection system.
NFR-6	Scalability	The develop system will not harmful and injurious to animals as well as human beings through the system.