

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

Date	19 October 2022
Team ID	PNT2022TMID14113
Project Name	IOT Based Smart Crop Protection System For Agriculture
Maximum Marks	4 Marks

Functional Requirements:

Following are the functional requirements of the proposed solution.

S.No.	Functional Requirement	Sub Requirement
1	User Registration	First method install the application Signing up with g-mail or phone number Creating a profile and upload the document Understand the guidelines to follow.
2	User Confirmation	The Email or Mobile method enable to authenticate using the (OTP)of the user.
3	Accessing datasets	Data's are use of sensors to track the performance of device connected to (IOT)cloud or database.
4	Interface sensor	IOT,a sensor interface is a bridge between a device any attached sensors.
5	Mobile application	It is used to provides information about weather forecasting and animal entering in crop field then signal to user.

Non-functional Requirements:

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

S.No.	Non-Functional Requirement	Description
1	Usability	This make the users complete the task accurately and user can operate the farm protection through the smart protection system.
2	Security	It was created to protect the crops from animals.
3	Reliability	It has a capacity to recognize the disturbance near the field and doesn't give a false caution signal.
4	Performance	When animals attempt to enter the field, IOT devices and sensors alert the farmer via message.
5	Availability	We can defend the crops against wild animals by creating and implementing resilient hardware and software. Highly demand available system for24x7 operations.
6	Scalability	This system's must handle expanding load & data retention needs integration of computer vision algorithms with IBM cloud and services makes it more efficient to retrieve photos at scale, enhancing

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