

**PROJECT DESIGN PHASE II**  
**SOLUTION REQUIREMENTS(FUNCTIONAL& NON-FUNCTIONAL)**

Date	11 November 2022
Team ID	PNT2022TMID43224
Project Name	lot based smart crop protection 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)
1.	User Registration	Install the app. Signing up with Gmail or phone number. Creating a profile. Understand the guidelines.
2.	User Confirmation	Email or phone number verificatin required via OTP.
3.	Accessing datasets	Data's are obtained by cloudant DB.
4.	Interface sensor	Connect the sensor and the application. When animals enter the field,the alarm is generated.
5.	Mobile application	It is used to control motors and field sprinklers.

**Non- functional Requirements:**

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

FR No.	Non-Functional Requirement	Description
1.	Usability	The project's contributes the farm protection through the smart protection system.
2.	Security	It was created to protect the crops from animals.
3.	Reliability	Farmers are able to safeguard their lands by help of this technology. They will also benefits from higher crop yields,which will improve our economic situation.
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.
6.	Scalability	This system's integration of computer vision algorithms with IBM cloudant services makes it mroe efficient to retrieve photos at scale, enhancing scalability.