Project Design Phase-II

Solution Requirements (Functional & Non-functional)

Date	21 October 2022
Team ID	PNT2022TMID23804
Project Name	IOT Based Smart Crop Protection SystemFor 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 verification required via OTP.
3	Accessing datasets	Data are obtained by cloud DB.
4	SD card module	It is used to store sound which gives fear to animals when they enter into the field.
5	Mobile application	Sensor details are stored in cloud and those details will be send to the farmer's mobile.

Non-functional Requirements

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

FR No.	Non-Functional Requirement	Description
1	Usability	This project is used protect the farm from wild animals as well as from human beings.
2	Security	It was created to protect the crops from animals and human beings.
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 or human beings try to enter into the farm, the Sd card module produce some sound that will give fear to the animals and when human beings try to enter into the farm the PIR sensor detect it and the buzzer will make sound.

5	Availability	Here we use most commonly available components and it is cost effective.
6	Scalability	This system integration of computer vision algorithms with IBM cloud services makes it more efficient to retrieve photos at scale, enhancing scalability.