PROJECT DESIGN PHASE-I
SOLUTION ARCHITECTURE

Date	19 September 2022
Team ID	PNT2022TMID35809
Project Name	IOT based Smart Crop Protection System
Maximum Marks	4 Marks

SOLUTION ARCHITECTURE:

- Animal intrusion is a major threat to the productivity of the crops, which affects food security and reduces the profit to the farmers.
- The peripheral part adopted wireless technologies such as Wifi for cooperating with the data centre by an advanced IOT gateway.
- PIR , Ultrasonic sensors used to detect the movement of animals and birds in the field, also humidity and moisture sensors can also be used.
- Pi Camera is used to capture real-time images in a farm field 24 × 7 i.e., day and night.
- The controller sends the signal as a SMS to the farmer through an app about the danger of crops using IOT cloud.
- Also, the motor and the sprinklers can also be controlled by the farmers from anywhere at any time using an app.

REFERENCE:

- https://www.slideshare.net/irjetjournal/irjet-smart-crop-protection-system-from-animals-using-pic
- https://www.academia.edu/44885381/Smart_Crop_Protection_System_from_Animals_using_PIC



PIR SENSOR 3

CAMERA

ULTRASONIC SENSOR 1

TFT DISPLAY

BUZZER 1

Arudino Uno

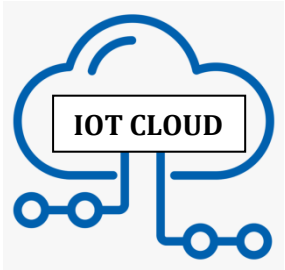
BUZZER 2

ULTRASONIC SENSOR 2

GSM MODULE

PIR SENSOR 2

PIR ESNSOR 1



Cloud message through android app