

## SPRINT 1: PROPER DETECTION AND CAMERA ACTIVATION

Date	18 November 2022
Team ID	PNT2022TMID51110
Project Name	IoT Based Smart Crop Protection System for Agriculture

wokwi.com/projects/347639479334339156

WOKWI SAVE SHARE sketch.ino Docs

sketch.ino diagram.json libraries.txt Library Manager

```

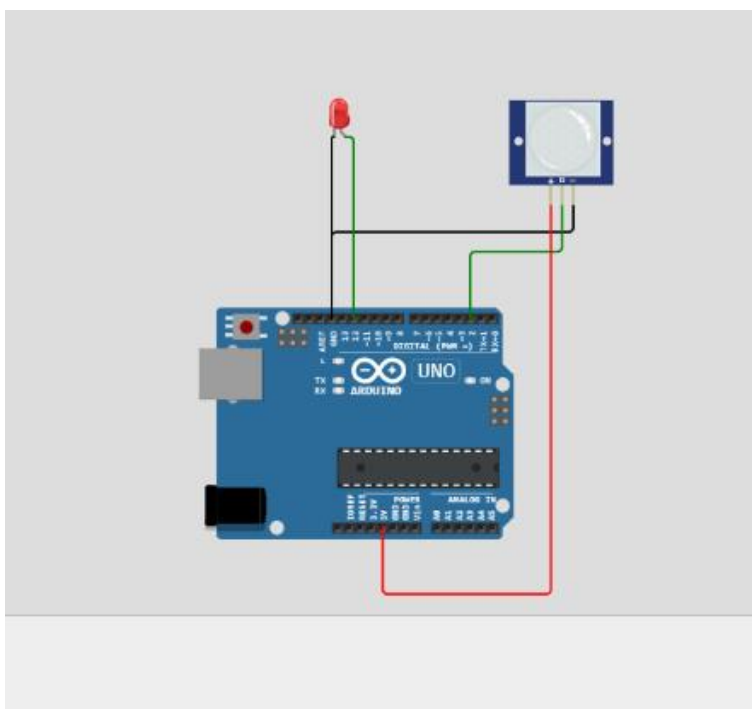
1 #include <WiFi.h>
2 #include <PubSubClient.h>
3 WiFiClient wifiClient;
4 String data3;
5 #define ORG "z22obn"
6 #define DEVICE_TYPE "Project"
7 #define DEVICE_ID "123456789"
8 #define TOKEN "y6Lb71znm8D&iv9euq"
9 int ledPin = 12; // choose the pin for the LED
10 int inputPin = 2; // choose the input pin (for PIR sensor)
11 int pirState = LOW; // we start, assuming no motion detected
12 int val = 0; // variable for reading the pin status
13 void setup() {
14   pinMode(ledPin, OUTPUT); // declare LED as output
15   pinMode(inputPin, INPUT); // declare sensor as input
16   Serial.begin(9600);
17 }
18 void loop() {
19   val = digitalRead(inputPin); // read input value
20   if (val == HIGH) { // check if the input is HIGH
21     digitalWrite(ledPin, HIGH); // turn LED ON
22     //void publishData();
23     if (pirState == LOW) {
24       // we have just turned on
25       Serial.println("Motion detected!");
26       Serial.println("Camera activated!");
27       delay(1000);

```

Simulation 00:49.723 99%

PIR Motion Sensor  
Simulate motion

Motion detected!  
Camera activated!  
Pictures taken!  
Motion ended!



#### PYTHON CODE:

```
#include <WiFi.h>
#include <PubSubClient.h>
WiFiClient wifiClient;
String data3;
#define ORG "z22obn"
#define DEVICE_TYPE "Project"
#define DEVICE_ID "123456789"
#define TOKEN "y6Lb7lznmbD&Iv9euq"
int ledPin = 12; // choose the pin for the LED
int inputPin = 2; // choose the input pin (for PIR sensor)
int pirState = LOW; // we start, assuming no motion detected
int val = 0; // variable for reading the pin status
void setup() {
  pinMode(ledPin, OUTPUT); // declare LED as output
  pinMode(inputPin, INPUT); // declare sensor as input
  Serial.begin(9600);
}
void loop() {
  val = digitalRead(inputPin); // read input value
  if (val == HIGH) { // check if the input is HIGH
    digitalWrite(ledPin, HIGH); // turn LED ON
    //void publishData();
    if (pirState == LOW) {
      // we have just turned on
      Serial.println("Motion detected!");
      Serial.println("Camera activated!");
```

```
delay(1000);
Serial.println("Pictures taken!");
// We only want to print on the output change, not state
pirState = HIGH;
}
}
else {
digitalWrite(ledPin, LOW); // turn LED OFF
//void publishData();
if (pirState == HIGH) {
// we have just turned of
Serial.println("Motion ended!");
// We only want to print on the output change, not state
pirState = LOW;
}}}
```

**WOKWI LINK:** <https://wokwi.com/projects/347639479334339156>