

project development phase

sprint 4

Date	14 NOV 2022
Team ID	PNT2022TMID25229
Project Name	IOT Based Smart Crop Protection System For Agriculture

To detect a animal in agriculture by using PIR sensors code:

```
#define LED 9 // choose the pin for the RELAY  
#define BUZZER 13
```

```
int ldr=0; int  
PIR=4; int  
val; void  
setup()  
{  
  Serial.begin(9600);  
  pinMode(LED, OUTPUT); // declare lamp as output  
  pinMode(PIR,INPUT);  
  pinMode(BUZZER,OUTPUT);  
}  
void loop()  
{  
  ldr = analogRead(A1);  
  val=digitalRead(PIR);  
  
  Serial.print("pir value = ");  
  Serial.println(val);  
  Serial.print("ldr value = ");  
  Serial.println(ldr);  
  if((ldr<=200)&& (val==HIGH))  
  {  
    digitalWrite(LED,HIGH);  
    digitalWrite(BUZZER,LOW);
```

```

}

else if((ldr>=200)&& (val==HIGH))
{
digitalWrite(BUZZER,HIGH);
digitalWrite(LED,LOW);
}
else {
digitalWrite(LED,LOW);
digitalWrite(BUZZER,LOW);
}

delay(300);
}

```

The screenshot displays the Tinkercad web interface for a project named 'Fabulous Jofo-Luulia'. The workspace shows a PIR sensor connected to an Arduino Uno R3. The sensor is labeled 'PIR Sensor' with 'Name 1'. The Arduino is connected to a red LED and a buzzer. The code editor on the right shows the C++ code for the project. The bottom status bar shows 'Serial Monitor' and the system clock '10:28 AM 11/18/2022'.

Simulator time: 00:00:41.607

Code

```

1 #define LED 9 // choose the pin for the RELAY
2 #define BUZZER 13
3
4 int ldr=0;
5 int PIR=4;
6 int val;
7 void setup()
8 {
9     Serial.begin(9600);
10    pinMode(LED, OUTPUT); // declare lamp as output
11    pinMode(PIR, INPUT);
12    pinMode(BUZZER, OUTPUT);
13 }
14 void loop()
15 {
16     ldr = analogRead(A1);
17     val=digitalRead(PIR);
18
19     Serial.print("pir value = ");
20     Serial.println(val);
21     Serial.print("ldr value = ");
22     Serial.println(ldr);
23     if((ldr<=200)&& (val==HIGH))
24     {
25         digitalWrite(LED,HIGH);
26         digitalWrite(BUZZER,LOW);
27

```

Serial Monitor

10:28 AM 11/18/2022

tinkercad.com/things/4awMLBShnmL-fabulous-jofo-luulia/edit?tenant=circuits

Fabulous Jofo-Luulia

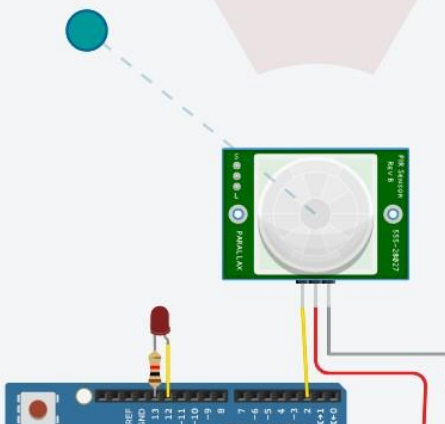
Simulator time: 00:00:21

All changes saved

Code Stop Simulation Send To

PIR Sensor

Name 1



```
1 #define LED 9 // choose the pin for the RELAY
2 #define BUZZER 13
3
4 int ldr=0;
5 int PIR=4;
6 int val;
7 void setup()
8 {
9   Serial.begin(9600);
10  pinMode(LED, OUTPUT); // declare lamp as output
11  pinMode(PIR, INPUT);
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13 }
14 void loop()
15 {
16   ldr = analogRead(A1);
17   val=digitalRead(PIR);
18
19   Serial.print("pir value = ");
20   Serial.println(val);
21   Serial.print("ldr value = ");
22   Serial.println(ldr);
23   if((ldr<=200)&& (val==HIGH))
24   {
25     digitalWrite(LED,HIGH);
26     digitalWrite(BUZZER,LOW);
27   }
28 }
```

Serial Monitor

Type here to search

10:27 AM 11/18/2022