

Sprint -3

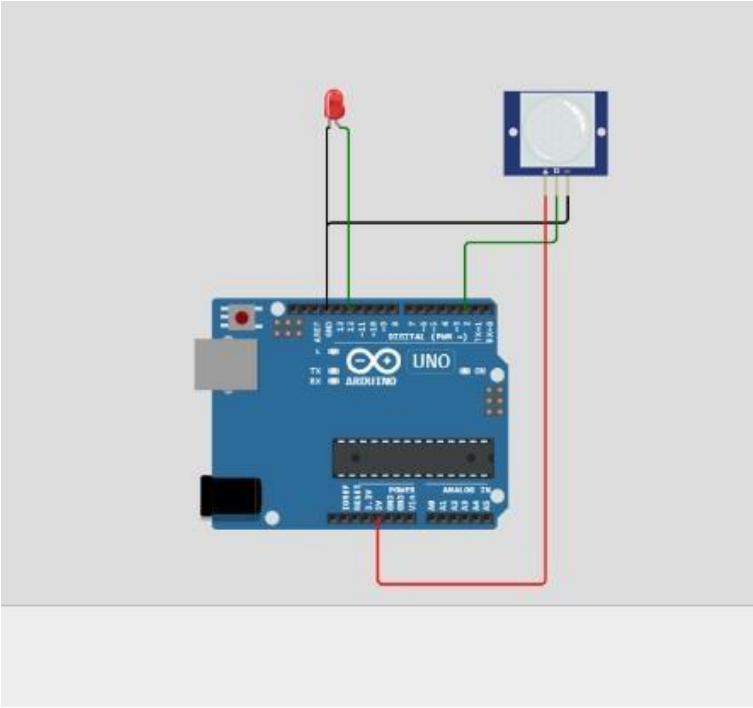
Date	11 Nov 2022
Team ID	PNT2022TMID11540
Project Name	IOT Based Smart Crop Protection System For Agriculture

The screenshot displays the Wokwi IDE interface. On the left, the 'sketch.ino' file contains the following code:

```
1 #include <WiFi.h>
2 #include <PubSubClient.h>
3 WiFiClient wificlient;
4 String data3;
5 #define ORG "oeezexo"
6 #define DEVICE_TYPE "resberypi"
7 #define DEVICE_ID "12345"
8 #define TOKEN "y6Lb7lzmB0&Iv9eug"
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);
28       Serial.println("Pictures taken!");
29       // We only want to print on the output change, not state
30       pirState = HIGH;
31     }
32   }
33   else {
34     digitalWrite(ledPin, LOW); // turn LED OFF
35     //void publishData();
36     if (pirState == HIGH) {
```

On the right, the 'Simulation' window shows a visual representation of the Arduino Uno board connected to a PIR Motion Sensor. Below the simulation, a log displays the following messages:

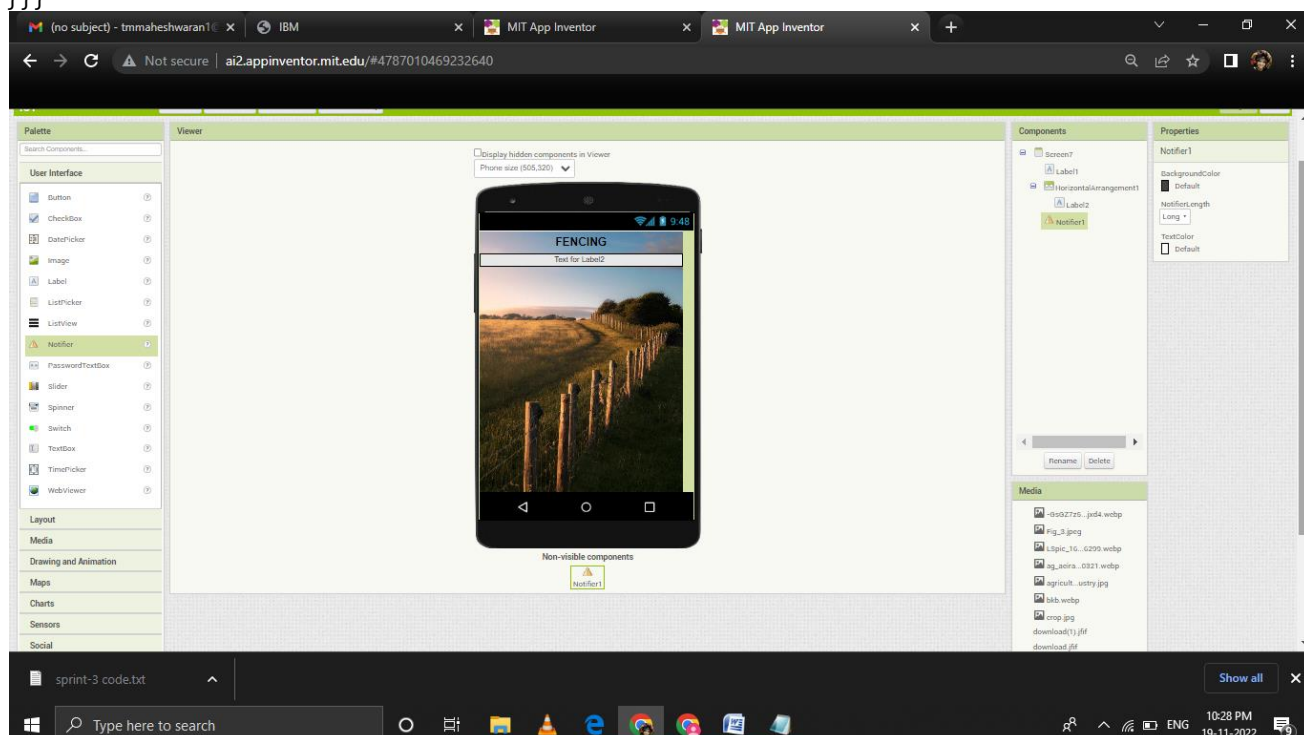
```
Motion detected!
Camera activated!
Pictures taken!
Motion ended!
```



PYTHON CODE:

```
#include <WiFi.h>
#include <PubSubClient.h>
WiFiClient wifiClient;
String data3;
#define ORG "oezexmo"
#define DEVICE_TYPE "resberypi"
#define DEVICE_ID "12345"
#define TOKEN "y6Lb71znmbD&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;
    }
  }
}
```

}}}



10:32



VoLTE+
LTE1 ↓↑



FENCING

Motion detected!



