SIT315-Concurrent and Distributed Programming

TaskM1.T1P: Build a simple Sense-Think-Act Board

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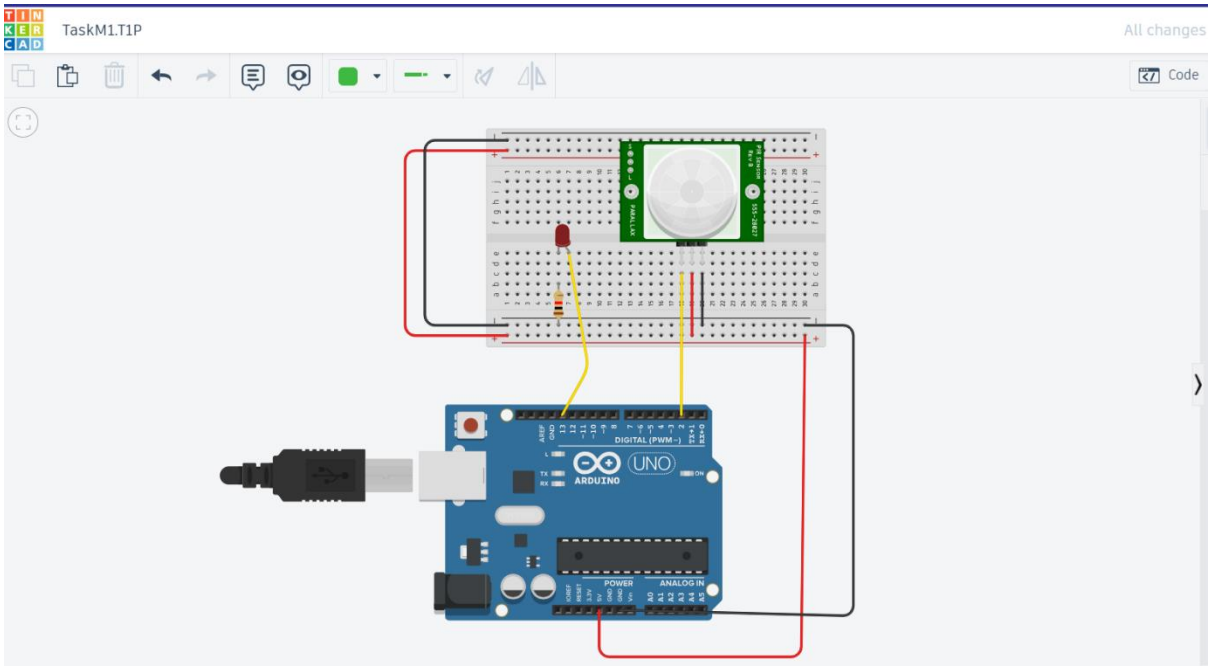
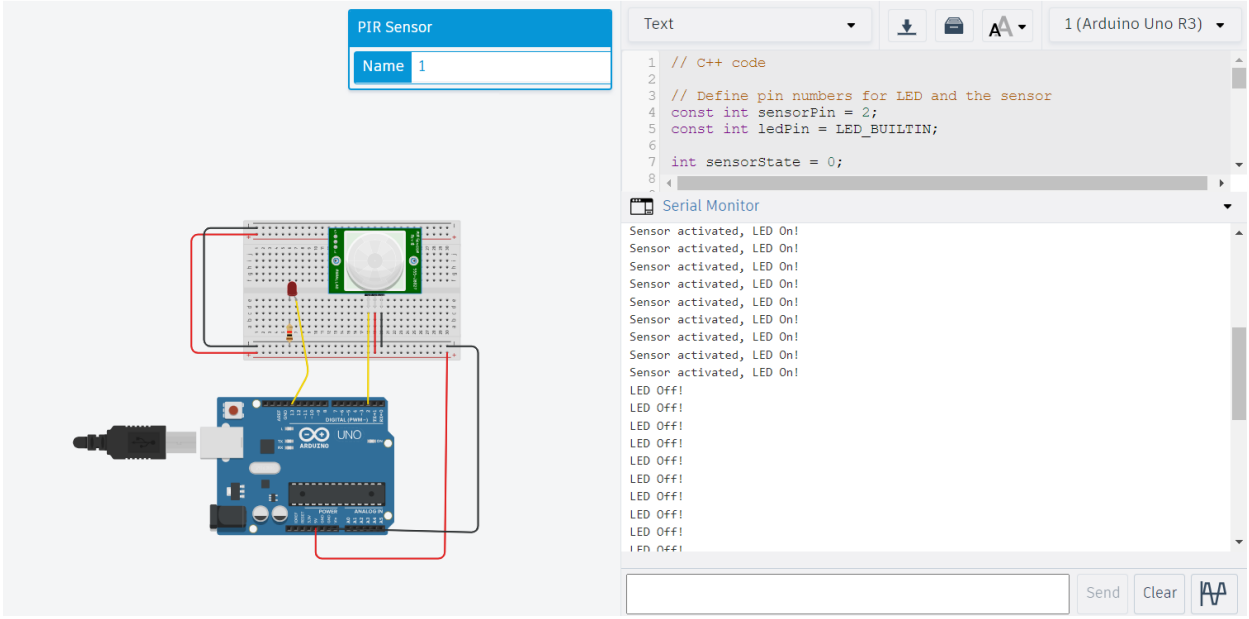
Diagram -Board on tinkercad.



A screenshoot of your system monitoring log



Source code of the program

```
// C++ code

// Define pin numbers for LED and the sensor
const int sensorPin = 2;
const int ledPin = LED_BUILTIN;

int sensorState = 0;

void setup()
{
 //Setting sensor pin as an input
 pinMode(sensorPin, INPUT);
 //Setting LED pin as an output
 pinMode(ledPin, OUTPUT);
 Serial.begin(9600);
}

void loop()
{
 //reading the state of the sensor
 sensorState = digitalRead(sensorPin);

 //checking if the sensor pin is HIGH. if it is, set the LED on.
 if (sensorState == HIGH) {
  digitalWrite(ledPin, HIGH);
  Serial.println("Sensor activated, LED On!");
 } else {
  digitalWrite(ledPin, LOW);
  Serial.println("LED Off!");
 }
 delay(10); // Delay to increase the performance
}
```

GitHub Link

https://github.com/RandiGunasekara/SIT315.git

Demonstration video Link

https://youtu.be/qIXsi0msbuo