

SPRINT-2

Date	16 November 2022
Team ID	PNT2022TMID38652
Project Name	SmartFarmer - IoT Enabled Smart Farming Application

WOKWI SIMULATION

CODE:

```
#include "DHT.h"
#define DHTPIN 15
#define DHTTYPE DHT22
#define LED 2

DHT dht (DHTPIN, DHTTYPE);

String data3;
float h, t;

void setup()
{
  Serial.begin(115200);
  dht.begin();
  pinMode(LED,OUTPUT);
  delay(100);
  Serial.println();
}

void loop()
{
  h = dht.readHumidity();
  t = dht.readTemperature();
  bool alert = t>25 || h>50;
  digitalWrite(LED, alert);
  Serial.print("temp:");
  Serial.println(t);
  Serial.print("Humid:");
  Serial.println(h);
  delay(10000);
}
```

OUTPUT:

The screenshot shows the Wokwi web interface for simulating an ESP32 microcontroller. A DHT22 temperature and humidity sensor is connected to the ESP32. The simulation is running, and the console displays the following output:

```
Humid:45.50
temp:17.30
Humid:45.50
temp:17.30
Humid:45.50
temp:35.00
Humid:63.00
```

The screenshot shows the Wokwi web interface for simulating an ESP32 microcontroller. A DHT22 temperature and humidity sensor is connected to the ESP32. The simulation is running, and the console displays the following output:

```
Humid:45.50
temp:17.30
Humid:45.50
temp:17.30
Humid:45.50
temp:17.30
Humid:45.50
```

node-red x IBM Watson x IBM-Proje x sketchino x MIT App Inventor x Reset your x https://sm x Analytics x SmartFarm x +

wokwi.com/projects/347117988904698451

Gmail Prime Video https://api.openwe... Members IBM Cloud Bulk SMS - Fast2SMS MIT App Inventor IBM Watson IoT Pla... vis temp vis us VIS TEMP Node-RED

WOKWI! SAVE SHARE sketchino Docs

sketch.ino • diagram.json • libraries.txt Library Manager

```
1 #include "DHT.h"
2 #define DHTPIN 15
3 #define DHTTYPE DHT22
4 #define LED 2
5
6 DHT dht (DHTPIN, DHTTYPE);
7
8
9 String data3;
10 float h, t;
11
12
13 void setup()
14 {
15   Serial.begin(115200);
16   dht.begin();
17   pinMode(LED, OUTPUT);
18   delay(1000);
19   Serial.println();
20 }
21
22 void loop()
23 {
24
25   h = dht.readHumidity();
26   t = dht.readTemperature();
27   bool alert = t>25 || h>50;
28   digitalWrite(LED, alert);
29   Serial.print("temp:");
30   Serial.println(t);
31   Serial.print("Humid:");
32   Serial.println(h);
33 }
```

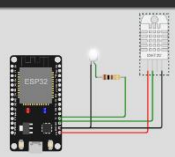
Simulation

00:22.400 41%

Editing DHT22

Temperature: 35.0°C

Humidity: 57.0%



temp:44.40
Humid:48.00
temp:35.00
Humid:48.00
temp:35.00
Humid:57.00

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