BUILD A SMART HOME IN WORKI WITH MINIMUM 2 SENSORS ,LED, BUZZER

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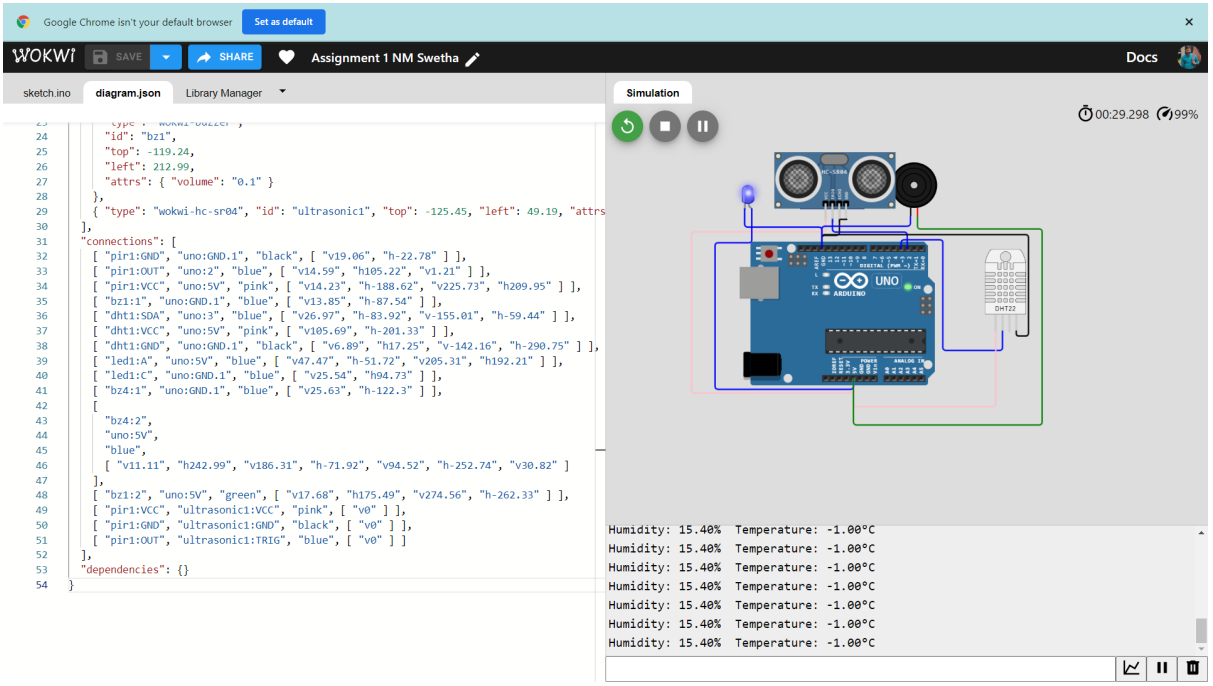
https://wokwi.com/projects/363086288453837825



Components required

- **LED Light**
- **Arduino UNO R3**
- **Ultrasonic Sensor**
- **Arduino buzzer**
- **DHT22**

Sketch.ino

```
#include <DHT.h>

#define DHTPIN 3     // what pin we're connected to
#define DHTTYPE DHT11   // DHT 11
DHT dht(DHTPIN, DHTTYPE);

int pirPin = 2;     // PIR sensor pin
int ledPin = 7;     // LED pin
int buzzerPin = 8; // Buzzer pin
```

```
int pirState = LOW;   // current state of the PIR sensor
int lastPirState = LOW;  // previous state of the PIR sensor

void setup() {
  pinMode(pirPin, INPUT);
  pinMode(ledPin, OUTPUT);
  pinMode(buzzerPin, OUTPUT);
  Serial.begin(9600);
  dht.begin();
}

void loop(){
  // Read PIR sensor state
  pirState = digitalRead(pirPin);

  // If the PIR sensor state has changed
  if (pirState != lastPirState) {
    // If motion is detected
    if (pirState == HIGH) {
      digitalWrite(ledPin, HIGH);
      digitalWrite(buzzerPin, HIGH);
      delay(500);
      digitalWrite(buzzerPin, LOW);
      Serial.println("Motion detected!");
    } else {
      digitalWrite(ledPin, LOW);
      digitalWrite(buzzerPin, LOW);
    }

    // Remember the PIR sensor state for next time
    lastPirState = pirState;
  }

  // Read temperature and humidity
  float humidity = dht.readHumidity();
  float temperature = dht.readTemperature();

  // Print temperature and humidity to serial monitor
  Serial.print("Humidity: ");
  Serial.print(humidity);
  Serial.print("%  Temperature: ");
  Serial.print(temperature);
  Serial.println("°C");
```

```
  delay(1000);
}
```

Diagram.json

```
{
  "version": 1,
  "author": "Swetha",
  "editor": "wokwi",
  "parts": [
    { "type": "wokwi-arduino-uno", "id": "uno", "top": 0, "left": 0,
"attrs": {} },
    {
      "type": "wokwi-pir-motion-sensor",
      "id": "pir1",
      "top": -119.73,
      "left": 84.47,
      "attrs": {}
    },
    { "type": "wokwi-dht22", "id": "dht1", "top": 10.71, "left":
345.18, "attrs": {} },
    {
      "type": "wokwi-led",
      "id": "led1",
      "top": -87.71,
      "left": -8.17,
      "attrs": { "color": "Blue" }
    },
    {
      "type": "wokwi-buzzer",
      "id": "bz1",
      "top": -119.24,
      "left": 212.99,
      "attrs": { "volume": "0.1" }
    },
    { "type": "wokwi-hc-sr04", "id": "ultrasonic1", "top": -125.45,
"left": 49.19, "attrs": {} }
  ],
  "connections": [
    [ "pir1:GND", "uno:GND.1", "black", [ "v19.06", "h-22.78" ] ],
    [ "pir1:OUT", "uno:2", "blue", [ "v14.59", "h105.22", "v1.21" ] ],
    [ "pir1:VCC", "uno:5V", "pink", [ "v14.23", "h-188.62", "v225.73",
"h209.95" ] ],
```

```
    [ "bz1:1", "uno:GND.1", "blue", [ "v13.85", "h-87.54" ] ],
    [ "dht1:SDA", "uno:3", "blue", [ "v26.97", "h-83.92", "v-155.01",
"h-59.44" ] ],
    [ "dht1:VCC", "uno:5V", "pink", [ "v105.69", "h-201.33" ] ],
    [ "dht1:GND", "uno:GND.1", "black", [ "v6.89", "h17.25",
"v-142.16", "h-290.75" ] ],
    [ "led1:A", "uno:5V", "blue", [ "v47.47", "h-51.72", "v205.31",
"h192.21" ] ],
    [ "led1:C", "uno:GND.1", "blue", [ "v25.54", "h94.73" ] ],
    [ "bz4:1", "uno:GND.1", "blue", [ "v25.63", "h-122.3" ] ],
    [
      "bz4:2",
      "uno:5V",
      "blue",
      [ "v11.11", "h242.99", "v186.31", "h-71.92", "v94.52",
"h-252.74", "v30.82" ]
    ],
    [ "bz1:2", "uno:5V", "green", [ "v17.68", "h175.49", "v274.56",
"h-262.33" ] ],
    [ "pir1:VCC", "ultrasonic1:VCC", "pink", [ "v0" ] ],
    [ "pir1:GND", "ultrasonic1:GND", "black", [ "v0" ] ],
    [ "pir1:OUT", "ultrasonic1:TRIG", "blue", [ "v0" ] ]
  ],
  "dependencies": {}
}
```