

Welcome to Project! Delighted to... x IBM x IoT-B8-2A4E (Afternoon Session) x Ultrasonic_sensor.ino - Wokwi Ar x ultrasonic sensor project using ib x +

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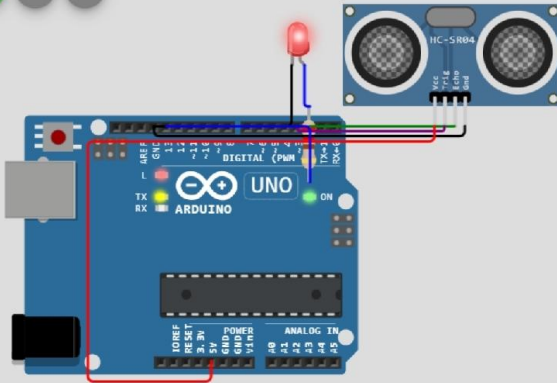
Ultrasonic_sensor.ino

diagram.json Library Manager

```
8
9 #define ECHO_PIN 2
10 #define TRIG_PIN 3
11
12 void setup() {
13   Serial.begin(115200);
14   pinMode(LED_BUILTIN, OUTPUT);
15   pinMode(TRIG_PIN, OUTPUT);
16   pinMode(ECHO_PIN, INPUT);
17 }
18
19 float readDistanceCM() {
20   digitalWrite(TRIG_PIN, LOW);
21   delayMicroseconds(2);
22   digitalWrite(TRIG_PIN, HIGH);
23   delayMicroseconds(10);
24   digitalWrite(TRIG_PIN, LOW);
25   int duration = pulseIn(ECHO_PIN, HIGH);
26   return duration * 0.034 / 2;
27 }
28
29 void loop() {
30   float distance = readDistanceCM();
31
32   bool isNearby = distance < 100;
33   digitalWrite(LED_BUILTIN, isNearby);
34
35   Serial.print("Measured distance: ");
36   Serial.println(readDistanceCM());
37
38   delay(100);
39 }
40
```

Simulation

00:09.590 99%



Measured distance: 96.68
Measured distance: 96.68
Measured distance: 96.76
Measured distance: 96.76
Measured distance: 96.66
Measured distance: 96.68
Measured distance: 96.68

22°C Partly cloudy

ENG IN 10:57 PM 25-10-2022