

***Write code and connections in wokwi for ultrasonic. Whenever distance is less than 100 cms send "alert" to ibm cloud and display in device recent events.***

***Solution:***

```
#define ECHO_PIN 2

#define TRIG_PIN 3

#define organization ="e03g10"

#define deviceType=" Arduino"

#define deviceId ="2502"

#define authMethod ="use-token-auth"

#define authToken ="12345678"

void setup() {

    Serial.begin(9600);

    pinMode(TRIG_PIN, OUTPUT);

    pinMode(ECHO_PIN, INPUT);

}

float readDistanceCM() {

    digitalWrite(TRIG_PIN, LOW);

    delayMicroseconds(2);

    digitalWrite(TRIG_PIN, HIGH);

    delayMicroseconds(10);

    digitalWrite(TRIG_PIN, LOW);

    int duration = pulseIn(ECHO_PIN, HIGH);

    return duration * 0.034 / 2;
```

```
}
```

```
void loop() {
```

```
    float distance = readDistanceCM();
```

```
    if(distance <= 100)
```

```
    {
```

```
        Serial.println("person detected ");
```

```
    }
```

```
    else{
```

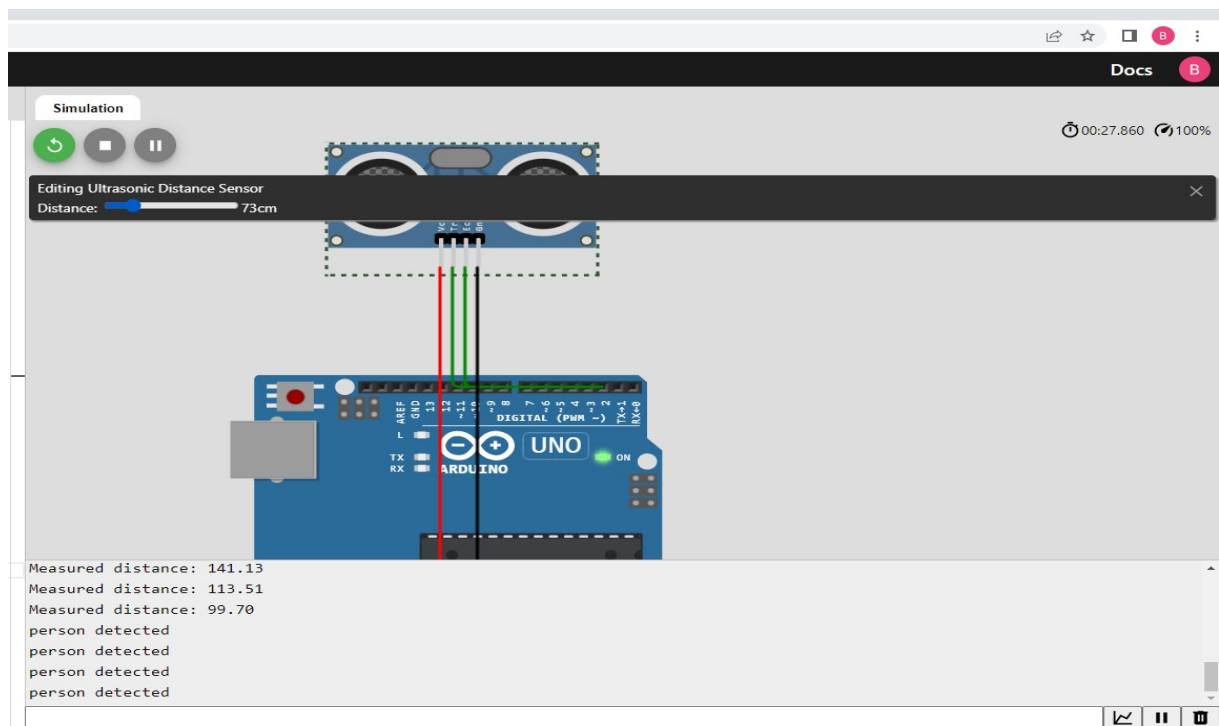
```
        Serial.print("Measured distance: ");
```

```
        Serial.println(readDistanceCM());
```

```
    }
```

```
    delay(1000);
```

```
}
```



### Device Recent Events

### Device Recent Events

**Browse**   Action   Device Types   Interfaces Add Device +

This table shows a summary of all devices that have been added. It can be filtered, organized, and searched on using different criteria. To get started, you can add devices by using the Add Device button, or by using API.

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Q Search by Device ID Device Simulator ☒ ID Filter

<input type="checkbox"/>	Device ID	Status	Device Type	Class ID	Date Added	Descriptive Location	Added By	
▼ <input type="checkbox"/>	2502	Disconnected	Arduino	Device	Oct 26, 2022 2:54 PM		820419205010@smartinternz.com	→ ...
<div>Identity   Device Information   Recent Events   State   Logs <span>X</span></div> <div> <div>Device ID</div> <div>2502</div> </div> <div> <div>Device Type</div> <div>Arduino</div> </div> <div> <div>Date Added</div> <div>Oct 26, 2022 2:54 PM</div> </div> <div> <div>Added By</div> <div>820419205010@smartinternz.com</div> </div> <div> <div>Connection Status</div> <div>Disconnected</div> </div>								

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## Device Drilldown - 2502

- Connection Information
- Recent Events
- State
- Device Information
- Metadata
- Diagnostics
- Connection Logs
- Device Actions

Added By 820419205010@smartinternz.com

Connection Status Disconnected

### Recent Events

The recent events listed show the live stream of data that is coming and going from this device.

Event	Value	Format	Last Received
event_1	"persondetected"	json	a few seconds ago
event_1	"persondetected"	json	a few seconds ago
event_1	"persondetected"	json	a few seconds ago
event_1	"persondetected"	json	a few seconds ago
event_1	"persondetected"	json	a few seconds ago

1 Simulation running