

## ASSIGNMENT 4:

Date	27 <sup>th</sup> October 2022
Team ID	PNT2022TMID15034
Project Name	IOT Based Real-Time River Water Quality Monitoring and Control System

```
long int echoPin=2;
long int trigPin=3;
long duration;
int distance;
void setup()
{
    Serial.begin(9600);
    pinMode(3,OUTPUT);
    pinMode(2,INPUT);
}

void loop()
{
    digitalWrite(3,LOW);
    delayMicroseconds(2);
    digitalWrite(3,HIGH);
    delayMicroseconds(10);
    digitalWrite(3,LOW);

    duration=pulseIn(2,HIGH);
    distance=(duration*0.034/2);
    delay(1000);
    if (distance<=100)
    {
        Serial.println("ALERT The Distance is less than 100cm");
    }
}
```

WOKWI

SAVE

SHARE

AlertDevice.ino

Docs

sketch.ino

diagram.json

Library Manager

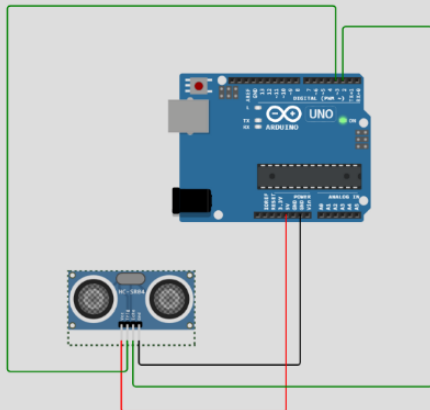
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8   pinMode(3,OUTPUT);
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12 void loop()
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14   digitalWrite(3,LOW);
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16   digitalWrite(3,HIGH);
17   delayMicroseconds(10);
18   digitalWrite(3,LOW);
19
20   duration=pulseIn(2,HIGH);
21   distance=(duration*0.034/2);
22   delay(1000);
23   if (distance<=100)
24   {
25     Serial.println("ALERT The Distance is less than 100cm");
26   }
27 }
28
29 //TeamId : PNT2022TMID15034
30
```

Simulation

00:44.125 99%

Editing Ultrasonic Distance Sensor

Distance: 231cm



WOKWI

SAVE

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AlertDevice.ino

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Library Manager

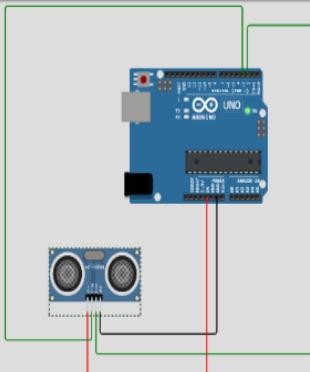
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23   if (distance<=100)
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25     Serial.println("ALERT The Distance is less than 100cm");
26   }
27 }
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29 //TeamId : PNT2022TMID15034
30
```

Simulation

00:05.911 99%

Editing Ultrasonic Distance Sensor

Distance: 73cm



ALERT The Distance is less than 100cm  
ALERT The Distance is less than 100cm  
ALERT The Distance is less than 100cm  
ALERT The Distance is less than 100cm  
ALERT The Distance is less than 100cm



criteria. To get started, you can add devices by using the Add Device button, or by using API.

Search by Device ID

Device Simulator ☐

<input type="checkbox"/>	Device ID	Status	Device Type	Class ID	Date Added	Descriptive Location	Added By	
<input checked="" type="checkbox"/>	54321	Disconnected	ESP32	Device	Oct 28, 2022 9:40 PM		611819106036@smartinternz.com	

Identity	Device Information	Recent Events	State	Logs	
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The recent events listed show the live stream of data that is coming and going from this device.

Event	Value	Format	Last Received
distance	{"distance":150}	json	a few seconds ago
distance	{"distance":157}	json	a few seconds ago
distance	{"ALERT":28}	json	a few seconds ago
distance	{"distance":191}	json	a few seconds ago
distance	{"ALERT":94}	json	a few seconds ago