ASSIGNMENT 4

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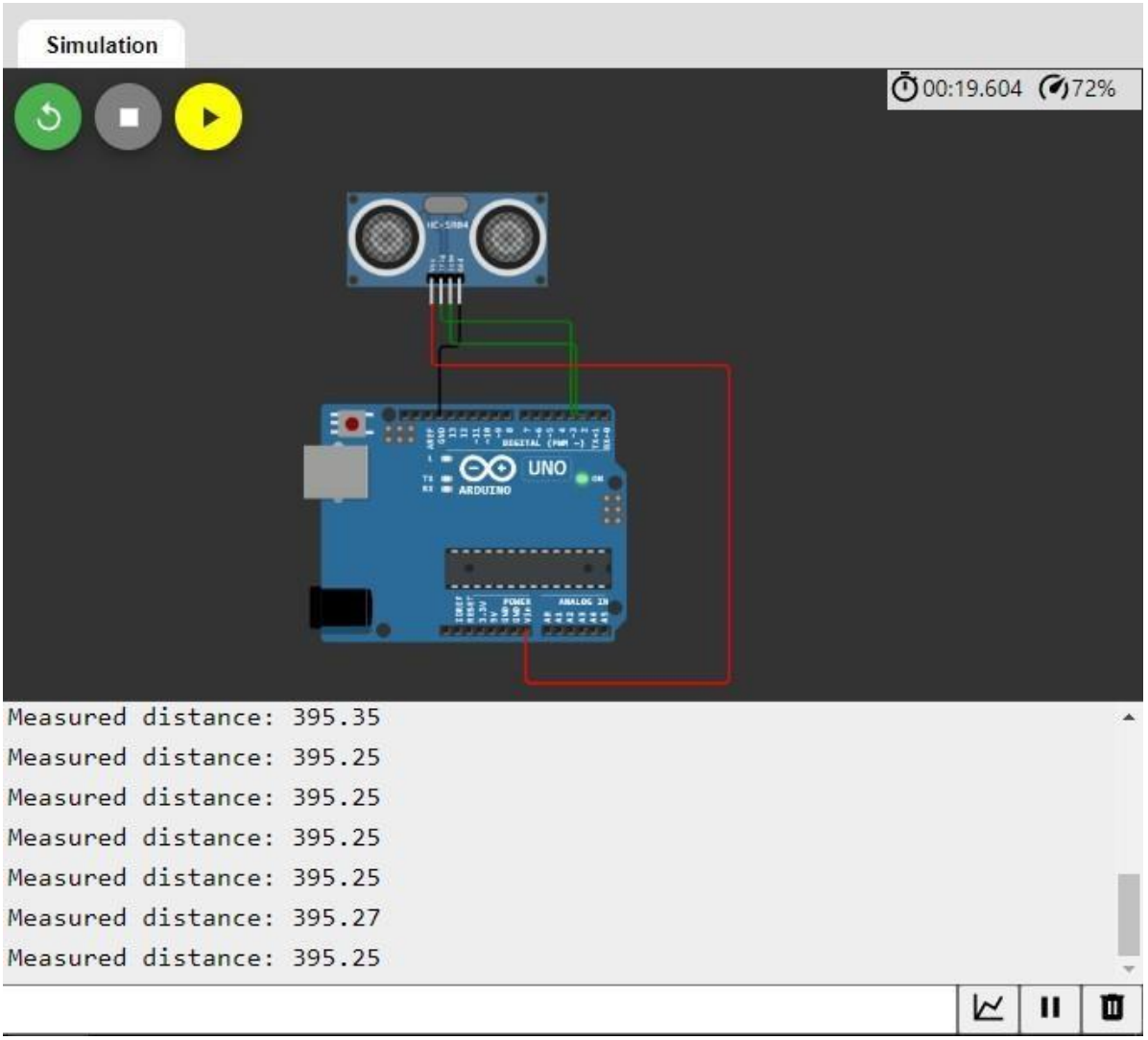
|---|---|
| Date | 15 November 2022 |
| Team ID | PNT2022TMID18446 |
| Project Name | Industry-Specific Intelligent Fire Management System |
| Maximum Marks | 2 Marks |

SOLUTION:

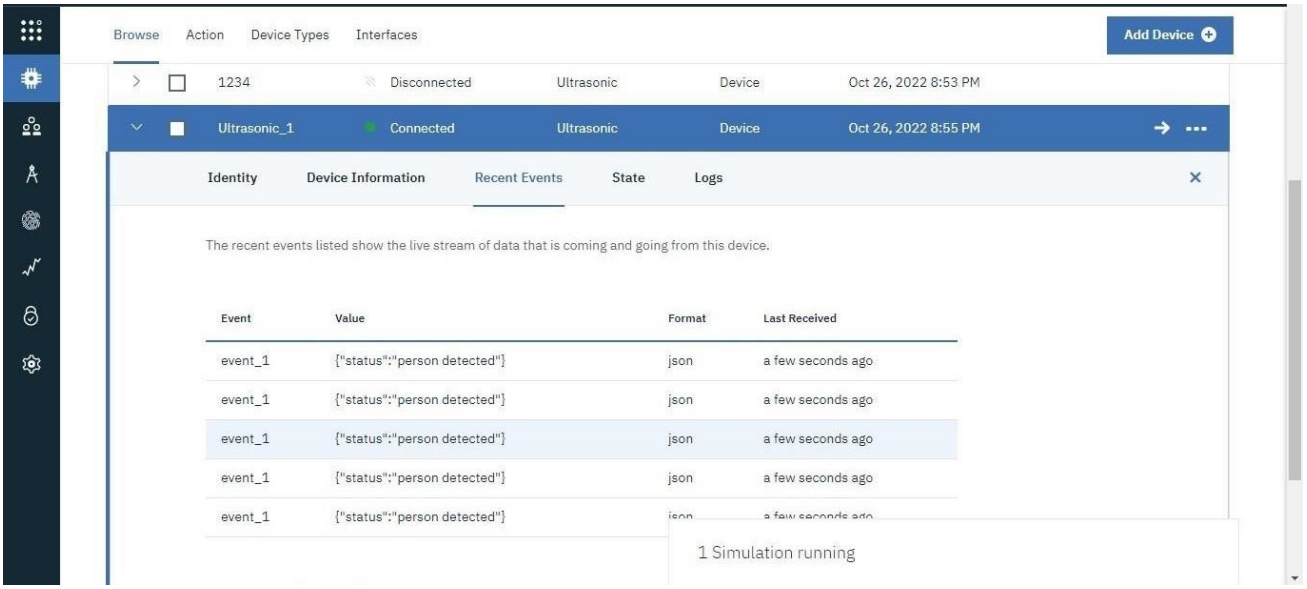
Code:

```
#define ECHO_PIN 2
#define TRIG_PIN 3
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);
}
```

Simulation:


Simulation
00:19.604
72%
UNO
ARDUINO
Measured distance: 395.35
Measured distance: 395.25
Measured distance: 395.25
Measured distance: 395.25
Measured distance: 395.25
Measured distance: 395.27
Measured distance: 395.25

IBM WATSON:


Browse
Action
Device Types
Interfaces
Add Device
1234
Disconnected
Ultrasonic
Device
Oct 26, 2022 8:53 PM
Ultrasonic_1
Connected
Ultrasonic
Device
Oct 26, 2022 8:55 PM
Identity
Device Information
Recent Events
State
Logs
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
{"status":"person detected"}
json
a few seconds ago
event_1
{"status":"person detected"}
json
a few seconds ago
event_1
{"status":"person detected"}
json
a few seconds ago
event_1
{"status":"person detected"}
json
a few seconds ago
event_1
{"status":"person detected"}
1 Simulation running