Assignment -4

Assignment Date	6TH NOVEMBER 2022
Student Name	G.SIVA
Team ID	PNT2022TMID25688
Project Name	Project-Smart Farmer-IoT Enabled Smart Farming Application
Maximum Marks	2 Marks

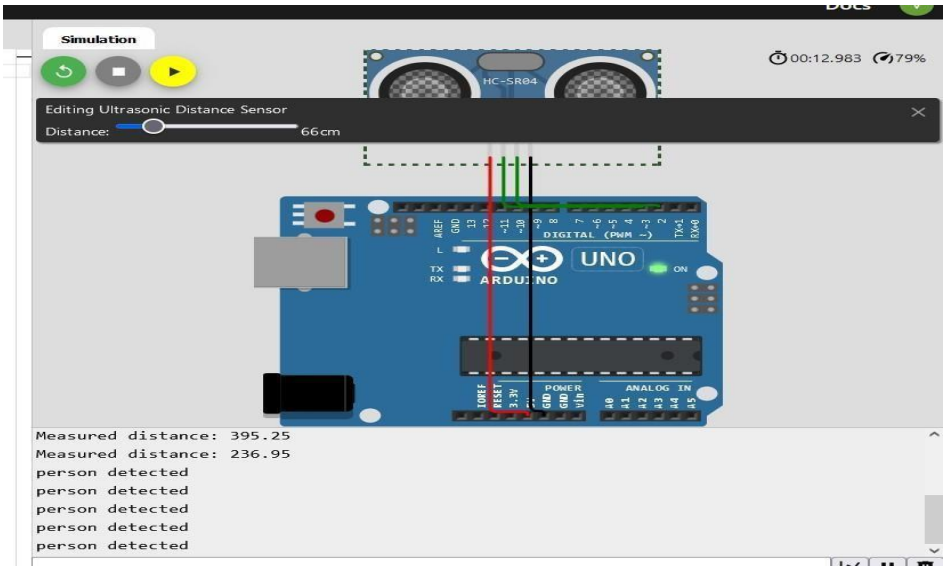
Question-1:

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 = "fkxdqs"
#define deviceType = "Arduino"
#define deviceId = "1200"
#define authMethod = "use-token-auth" #define
authToken = "00000000"  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
```

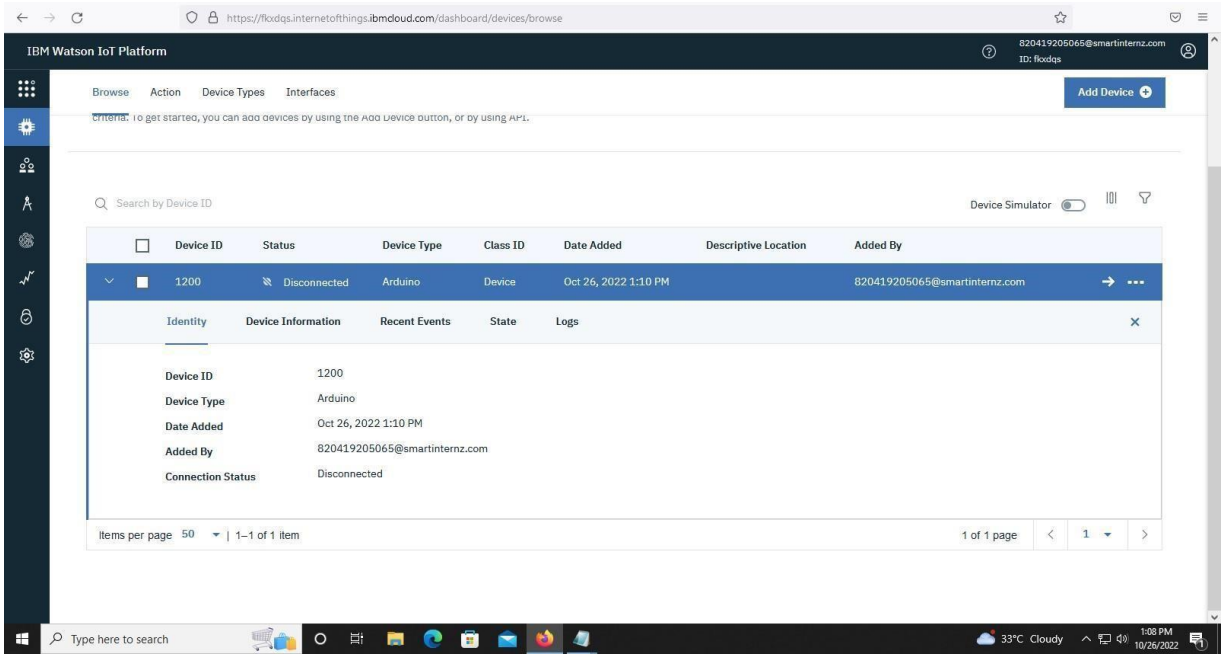
```
duration = pulseIn(ECHO_PIN, HIGH);
return duration * 0.034 / 2;

}

void loop() {  float distance = readDistanceCM();
if(distance <=
100)
 {
   Serial.println("person detected ");
 }
 else{
 Serial.print("Measured distance: ");
  Serial.println(readDistanceCM());
 }
  delay(1000);
}
```

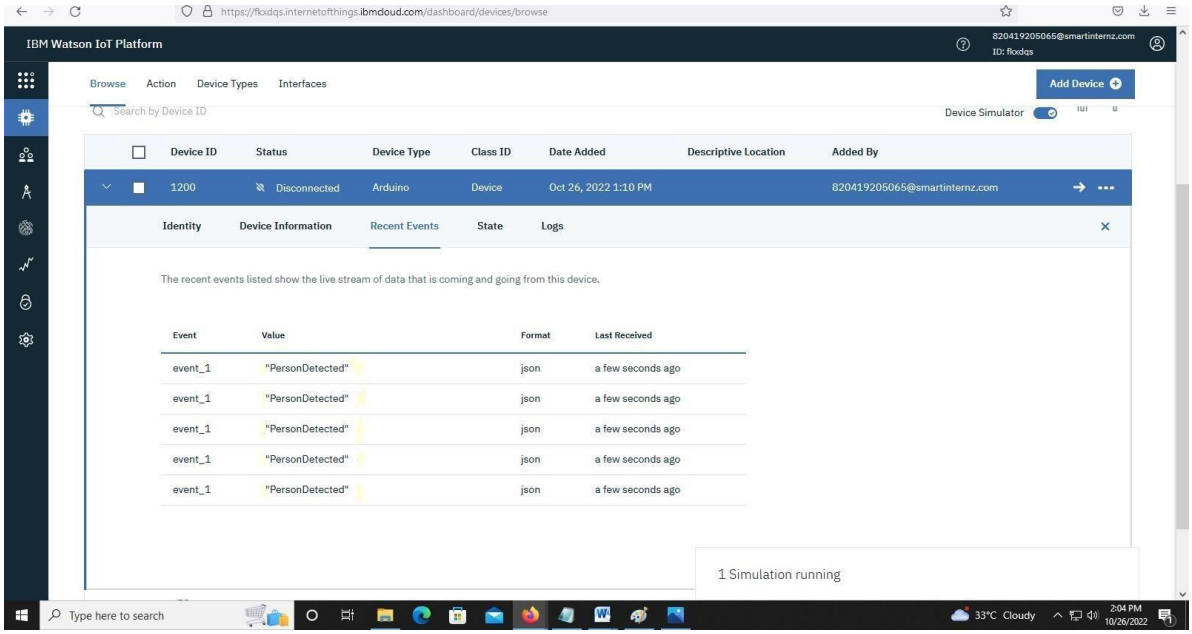


Wokwi Link: https://wokwi.com/projects/346567349532361298

IBM Cloud

Device Recent Events





WOWKI EXECUTION PART WITH ANOTHER CODE: