ASSIGNMENT-4

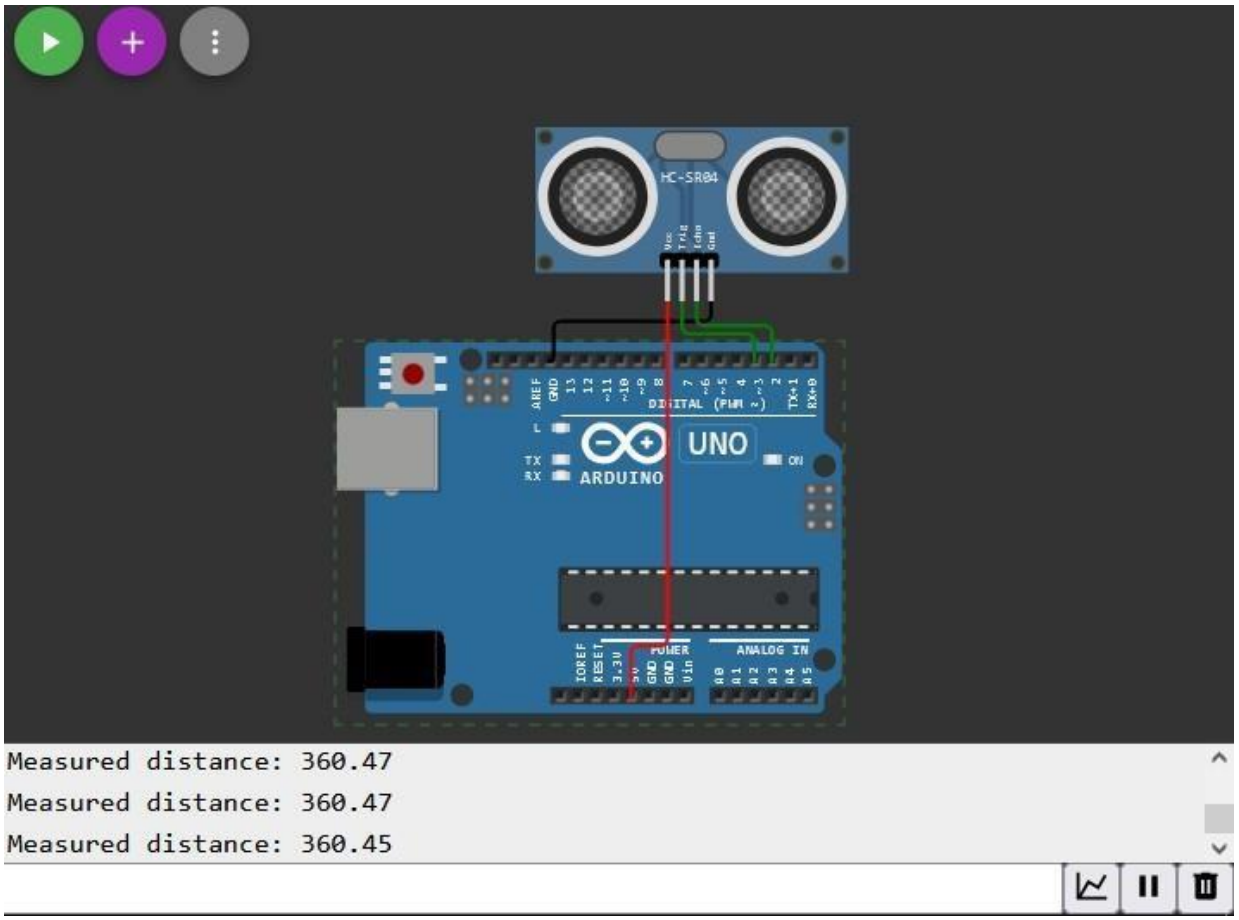
Date	26 October 2022
Team ID	PNT2022TMID15074
Project Name	Real-Time River Water Quality Monitoring and Control system
Maximum Marks	2 Marks

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 = "mmbh4c"

#define deviceType = "Ultrasonic"

#define deviceId = "1112"

#define authMethod = "use-token-auth"

#define authToken = "123456789"

  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(100);

}
```



IBM Cloud

Device Recent Events