

ASSIGNMENT 4

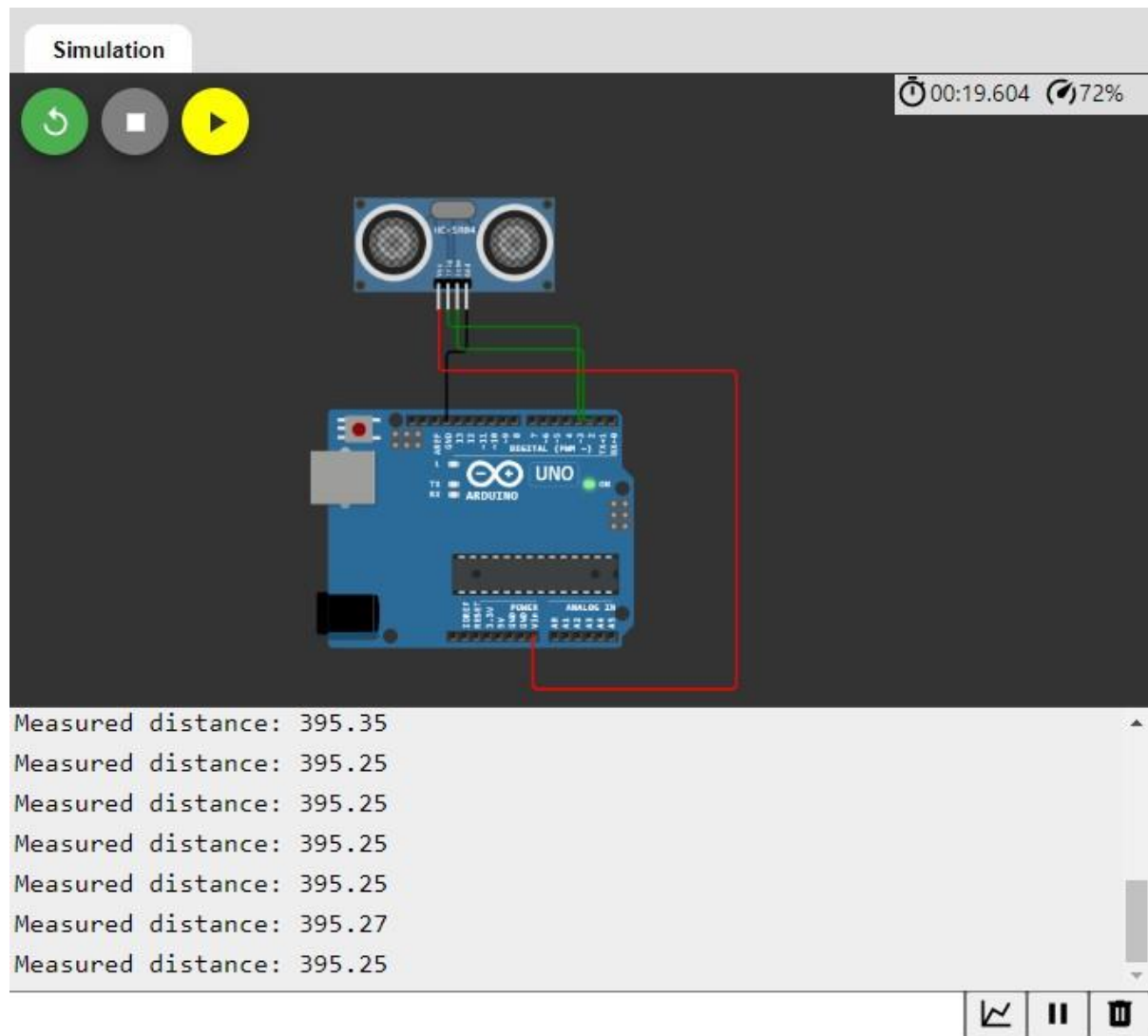
Date	27 October 2022
Team ID	PNT2022TMID25756
Project Name	Smart Farmer-IOT Enabled Smart Farming Application
Maximum Marks	2 Marks

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:



IBM WATSON:

You are signed in as 1 xHelloWokwi.ino - Wokwi xESP32 Simulation | Wokwi xDHT22-example.ino - Wokwi xService Details - IBM xIBM Watson IoT Platform x

lm9xem.internetofthings.ibmcloud.com/dashboard/devices/browse

IBM Watson IoT Platform

daran942002_ec@miepcoen.g.ac.in
ID: lm9xem

BrowseActionDevice TypesInterfaces

Add Device

>1234DisconnectedUltrasonicDeviceOct 26, 2022 8:53 PM

▼Ultrasonic_1ConnectedUltrasonicDeviceOct 26, 2022 8:55 PM→...

IdentityDevice InformationRecent EventsStateLogs

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"}	json	a few seconds ago

1 Simulation running

Type here to search

27°C Light rain20:57
26-10-2022