Delivery of Sprint_1

Team ID	PNT2022TMID26538
Project Name	Smart Waste Management System For Metropolitan Cities

CIRCUIT CODE:

```cpp
#include <ESP32Servo.h>
#include <LiquidCrystal_I2C.h>
LiquidCrystal_I2C LCD = LiquidCrystal_I2C(0x27, 16, 2);
Servo servo;
int trigPin1 = 2;
```
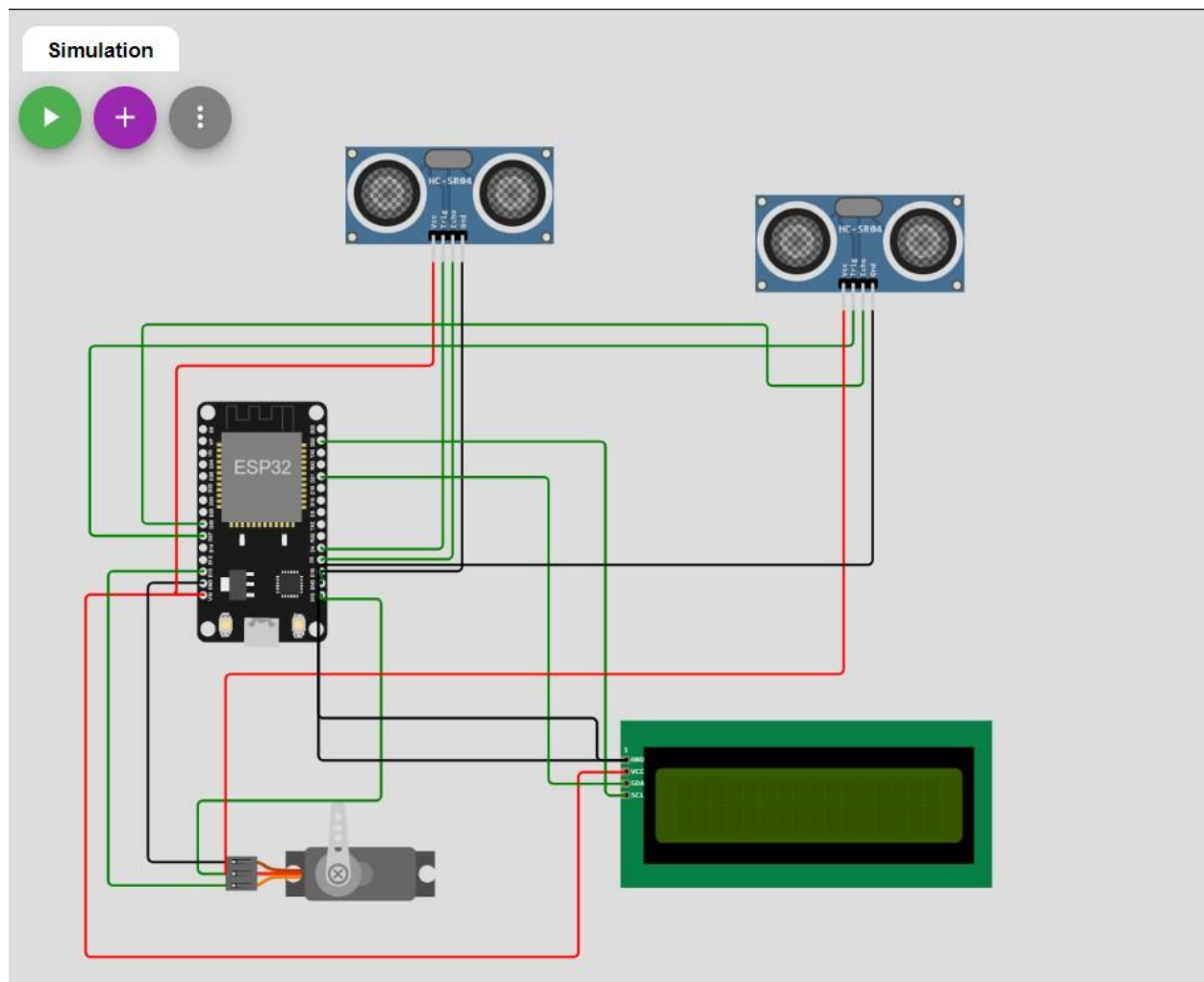
```arduino
  digitalWrite(trigPin2, LOW);
  delayMicroseconds(2);
  digitalWrite(trigPin2, HIGH);
  delayMicroseconds(10);
  digitalWrite(trigPin2, LOW);
  duration2 = pulseIn(echoPin2, HIGH);
  distance2= duration2*0.034/2;
  Serial.println("The lid is closed");

  }
  LCD.setCursor(0,1);
  LCD.print("Fill Status: ");

  if(distance2>300 && distance2<=400){
    LCD.setCursor(12,1);
    LCD.print("25% ");
    Serial.println("Bin status:25%");
  }
  else if(distance2 > 200 && distance2<= 299){
    LCD.setCursor(12,1);
    LCD.print("50%");
    Serial.println("Bin status:50%");
  }
  else if(distance2 >50 && distance2<=199){
    LCD.setCursor(12,1);
    LCD.print("75%");
    Serial.println("Bin status:75%");
  }
  else{
    LCD.setCursor(12,1);
    LCD.print("100%");
    Serial.println("Bin status:100%");
  }
  if(distance1<=50){
    servo.write(90);
  }
  else{
    servo.write(0);
  }
}
```

CIRCUIT DESIGN:

OUTPUT:

sketch.ino ●   diagram.json ●   libraries.txt ●   Library Manager ▾   Simulation

```
48
49      }
50    LCD.setCursor(0,1);
51    LCD.print("Fill Status: ");
52
53    if(distance2>300 && distance2<=400){
54      LCD.setCursor(12,1);
55      LCD.print("25% ");
56      Serial.println("Bin status:25%");
57    }
58    else if(distance2 > 200 && distance2<= 299){
59      LCD.setCursor(12,1);
60      LCD.print("50%");
61      Serial.println("Bin status:50%");
62    }
63    else if(distance2 >50 && distance2<=199){
64      LCD.setCursor(12,1);
65      LCD.print("75%");
66      Serial.println("Bin status:75%");
67    }
68    else{
69      LCD.setCursor(12,1);
70      LCD.print("100%");
71      Serial.println("Bin status:100%");
72    }
73    if(distance1<=50){
74      servo.write(90);
75    }
76    else{
77      servo.write(0);
78    }
79  }
80
```

```
The lid is open
Bin status:100%
The lid is open
Bin status:100%
The lid is open
Bin status:100%
The lid is open
```