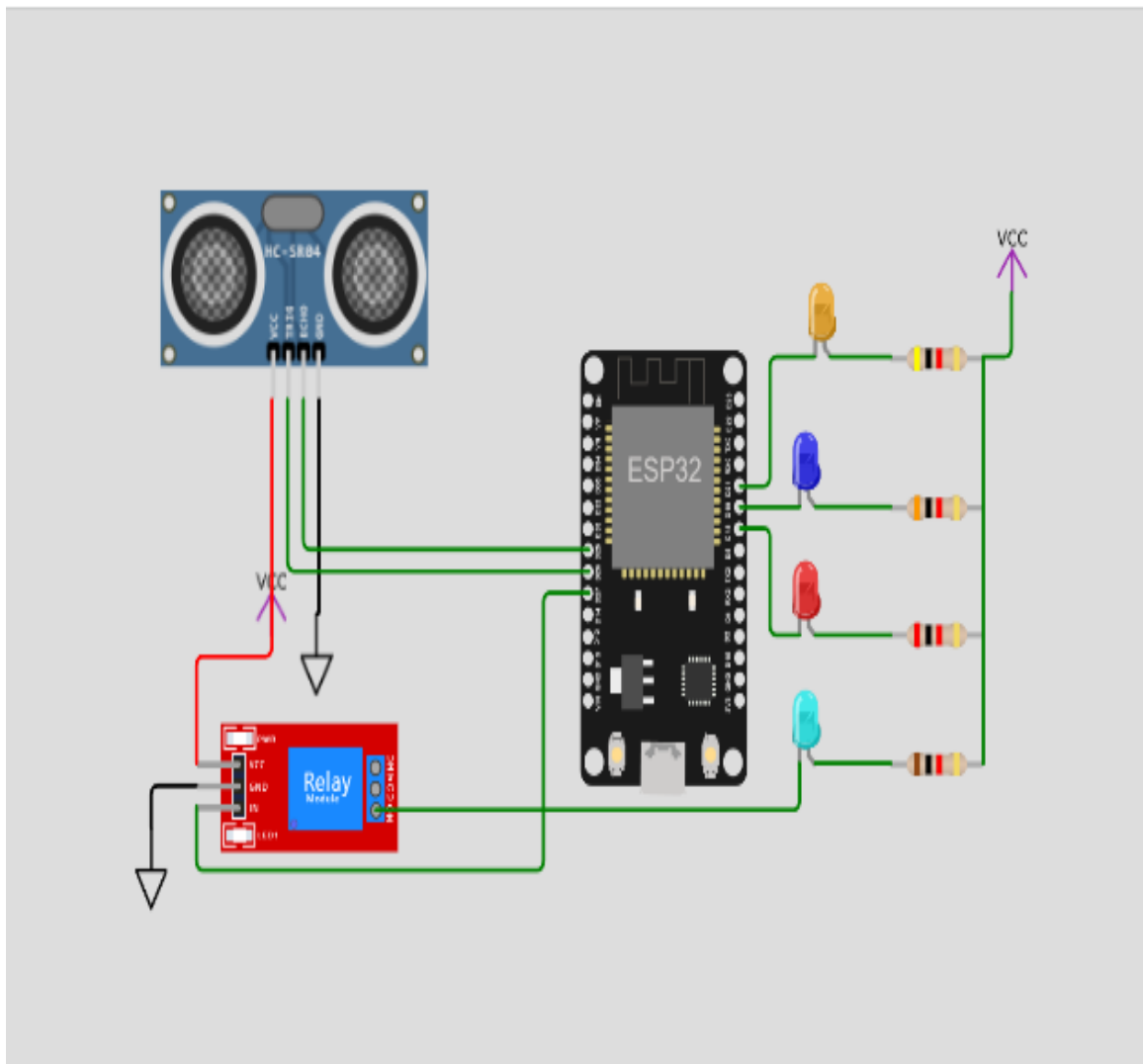


## Project Design Phase-3

Date	18 October 2023
Team ID	456
Project Name	4123-Smart Water Management
Team Name	Proj_227234_Team_2
Team Members	5

### Smart Water Management Block Diagram:



## Program code for SWM:

```
sketch.ino  diagram.json  Library Manager  ▼

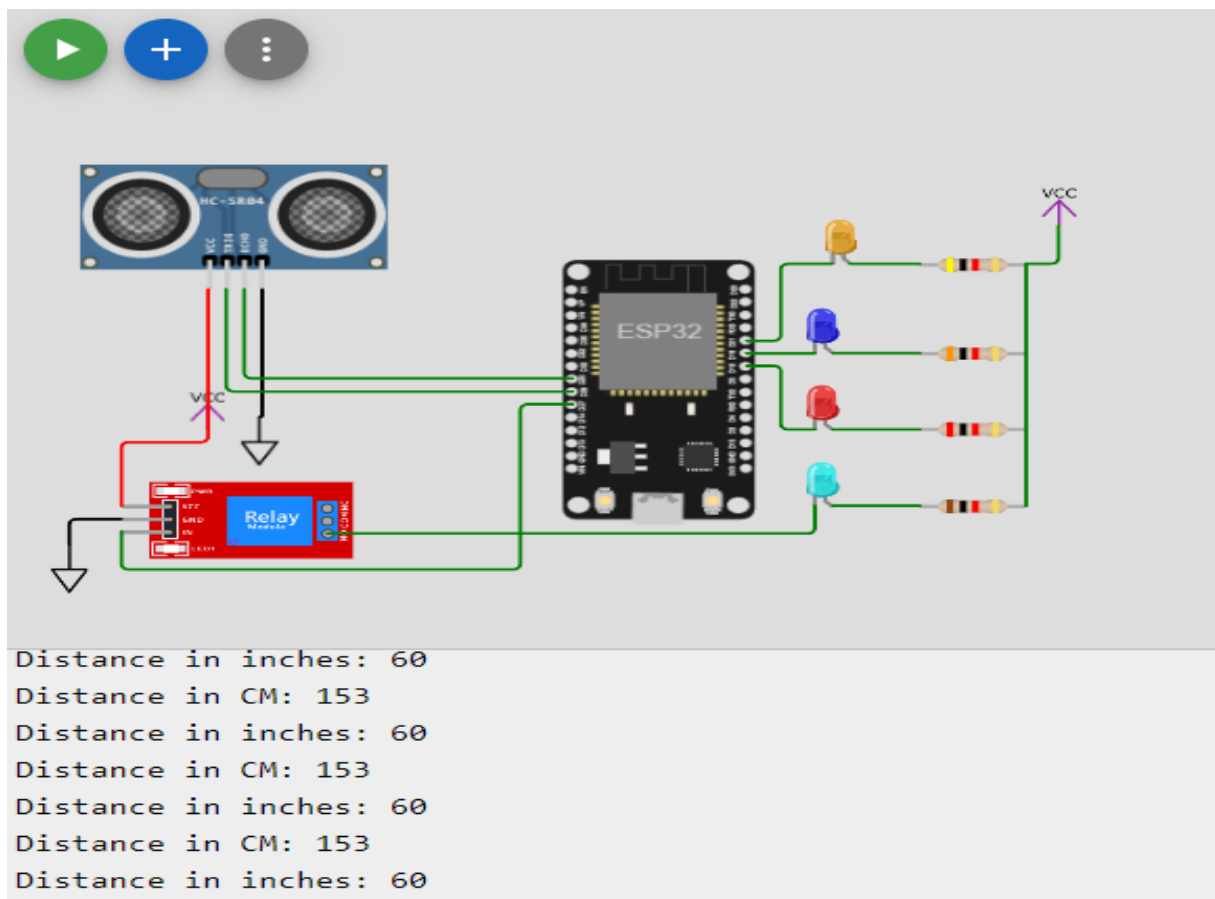
1  #define PIN_TRIG 26
2  #define PIN_ECHO 25
3  #define LOWLED 18
4  #define MIDLED 19
5  #define HIGHLED 21
6  #define MOTOR 27
7  unsigned int level = 0;
8
9  void setup() {
10
11      pinMode(LOWLED, OUTPUT);
12      pinMode(MIDLED, OUTPUT);
13      pinMode(HIGHLED, OUTPUT);
14      pinMode(MOTOR, OUTPUT);
15      digitalWrite(LOWLED, HIGH);
16      digitalWrite(MIDLED, HIGH);
17      digitalWrite(HIGHLED, HIGH);
18      digitalWrite(MOTOR, LOW);
19
20      Serial.begin(115200);
21      pinMode(PIN_TRIG, OUTPUT);
22      pinMode(PIN_ECHO, INPUT);
23  }
24
25  void loop() {
26      // Start a new measurement:
27
28      // digitalWrite(PIN_TRIG, HIGH);
29
30      digitalWrite(PIN_TRIG, HIGH);
31      delayMicroseconds(10);
32      digitalWrite(PIN_TRIG, LOW);
33
34      // Read the result:
35      int duration = pulseIn(PIN_ECHO, HIGH);
36      Serial.print("Distance in CM: ");
37      Serial.println(duration / 58);
38      Serial.print("Distance in inches: ");
39      Serial.println(duration / 148);
40
41      level = (duration / 10);
42
43      if(level < 100)
44      {
45          digitalWrite(LOWLED, LOW);
46          digitalWrite(MOTOR, HIGH);
47          digitalWrite(HIGHLED, HIGH);
48          digitalWrite(MIDLED, HIGH);
49      }
50
51      else if ((level > 200 ) && (level < 400))
52      {
53          digitalWrite(LOWLED, HIGH);
54          digitalWrite(HIGHLED, HIGH);
55          digitalWrite(MIDLED, LOW);
56      }
57  }
```

```

49
50     else if ((level > 200 ) && (level < 400))
51     {
52         digitalWrite(LOWLED, HIGH);
53         digitalWrite(HIGHLED, HIGH);
54         digitalWrite(MIDLED, LOW);
55     }
56
57     else if (level >= 400 )
58     {
59         digitalWrite(HIGHLED, LOW);
60         digitalWrite(MIDLED, HIGH);
61         digitalWrite(LOWLED, HIGH);
62         digitalWrite(MOTOR, LOW);
63     }
64     delay(1000);
65 }
66

```

## OUTPUT:



Reference: <https://wokwi.com/projects/378900005565787137>

