

SMART WASTE MANAGEMENT SYSTEM FOR METROPOLITAN CITIES

ASSIGNMENT-1

SUBMITTED BY:

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Circuit design Magnificent Jofo

tinkercad.com/things/6k71r5jGc0n-magnificent-jofo/editel

All changes saved

Code

Start Simulation

Send To

1 (Arduino Uno R3)

Blocks + Text

Output

Input

Notation

Control

Math

Variables

set built-in LED to HIGH

set pin 0 to HIGH

set pin 3 to 0

rotate servo on pin 0 to 0 degree

play speaker on pin 0 with tone 60

turn off speaker on pin 0

print to serial monitor hello world with

set RGB LED in pins 3 6 5

set gas to read analog pin A0

if gas > 250 then

set pin 11 to HIGH

set pin 13 to LOW

play speaker on pin 7 with tone 42 for 1 sec

else

set pin 11 to LOW

set pin 13 to HIGH

turn off speaker on pin 7

Serial Monitor

```
1 // C++ code
2 //
3 int gas = 0;
4
5 void setup()
6 {
7   pinMode(A0, INPUT);
8   pinMode(11, OUTPUT);
9   pinMode(13, OUTPUT);
10  pinMode(7, OUTPUT);
11 }
12
13 void loop()
14 {
15   gas = analogRead(A0);
16   if (gas > 250) {
17     digitalWrite(11, HIGH);
18     digitalWrite(13, LOW);
19     tone(7, 185, 1000); // play tone 42 (F#3 = 185 Hz)
20   } else {
21     digitalWrite(11, LOW);
22     digitalWrite(13, HIGH);
23     noTone(7);
24   }
25   delay(10); // Delay a little bit to improve simulation
26 }
```

Gas Sensor

Name 1

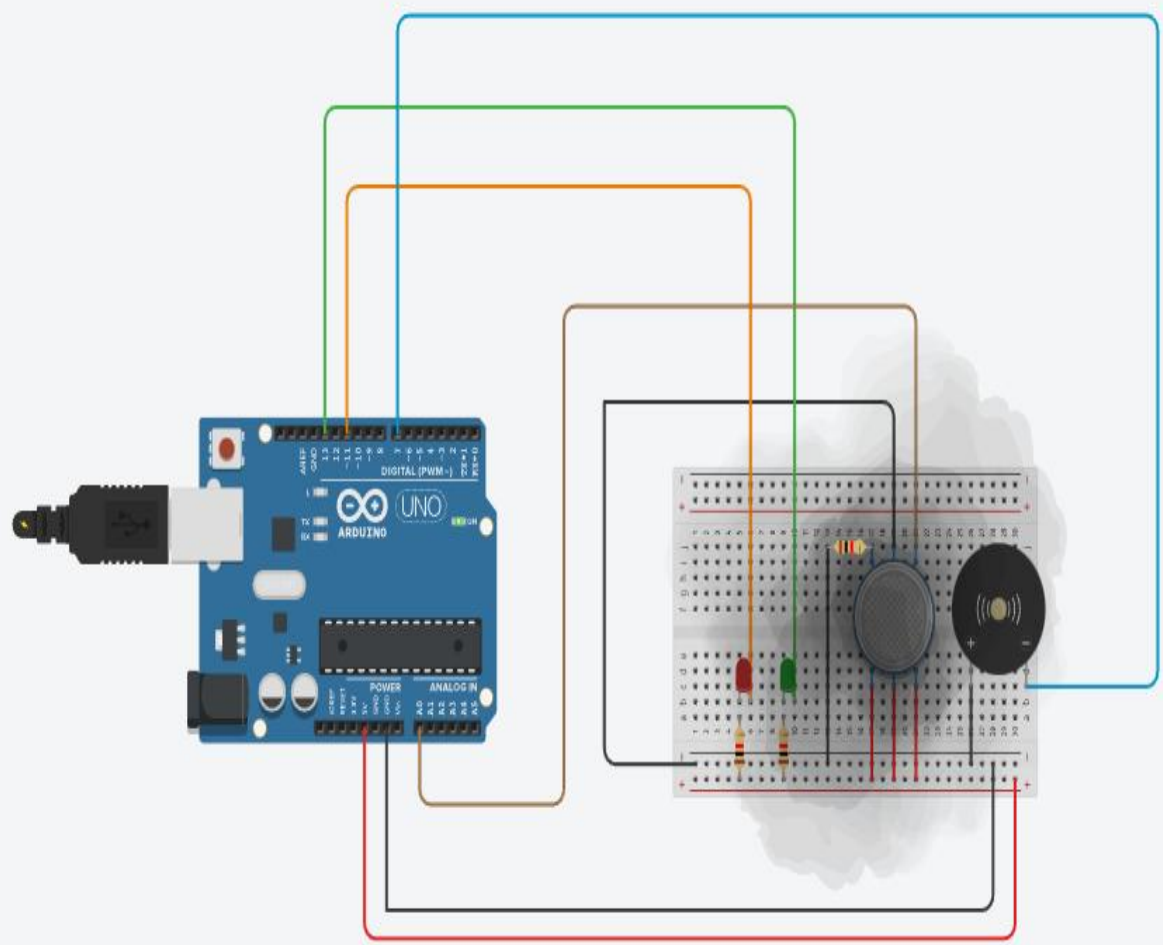


Diagram showing an Arduino Uno R3 connected to a breadboard circuit. The breadboard contains an RGB LED, a speaker, and a servo motor. The code blocks are as follows:

```
set built-in LED to HIGH
set pin 0 to HIGH
set pin 3 to 0
rotate servo on pin 0 to 0 degree
play speaker on pin 0 with tone 60
turn off speaker on pin 0
print to serial monitor hello world with
set RGB LED in pins 3 6 5
```

Code blocks (right side):

- set gas to read analog pin A0
- if gas > 250 then
 - set pin 11 to HIGH
 - set pin 13 to LOW
 - play speaker on pin 7 with tone 42 for 1 sec
- else
 - set pin 11 to LOW
 - set pin 13 to HIGH
 - turn off speaker on pin 7

[code]

```
// C++ code
```

```
//
```

```
int gas = 0;
```

```
void setup()
```

```
{  
  pinMode(A0, INPUT);  
  pinMode(11, OUTPUT);  
  pinMode(13, OUTPUT);  
  pinMode(7, OUTPUT);  
}
```

```
void loop()
```

```
{  
  gas = analogRead(A0);  
  if (gas > 250) {  
    digitalWrite(11, HIGH);  
    digitalWrite(13, LOW);  
    tone(7, 185, 1000); // play tone 42 (F#3 = 185 Hz)  
  } else {  
    digitalWrite(11, LOW);  
    digitalWrite(13, HIGH);  
    noTone(7);  
  }  
}
```

```
}  
  delay(10); // Delay a little bit to improve simulation performance  
}  
[/code]
```