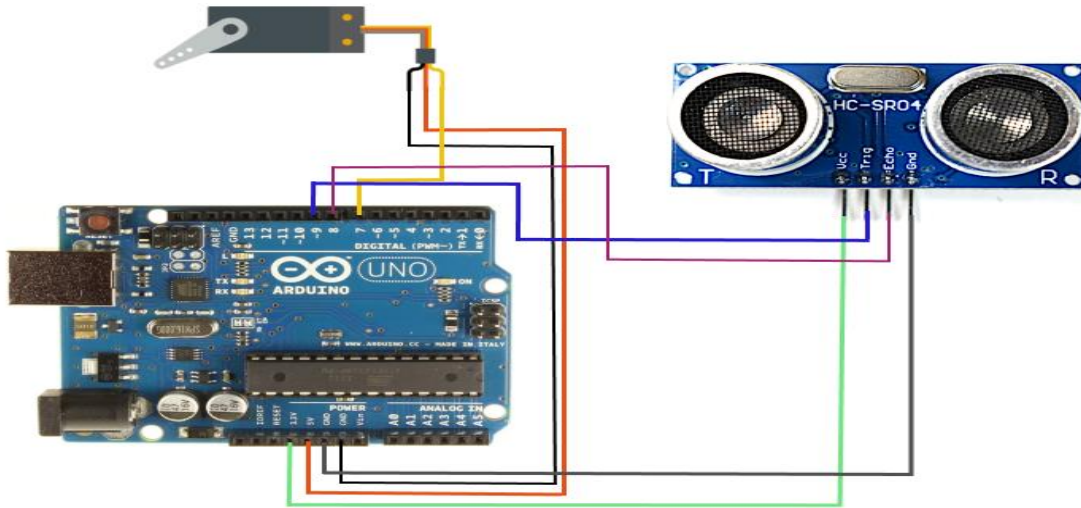


Circuit



This is the circuit for uplevel servo by measuring distance using ultrasonic sensor

Code:

```
#include <Servo.h>

Servo servo1;

int trigPin = 9;
int echoPin = 8;
long distance;
long duration;

void setup()
{
  servo1.attach(7);

  pinMode(trigPin, OUTPUT);

  pinMode(echoPin, INPUT); // put your setup code here, to run once:
}

void loop()
{
```

```
ultra_sonic();

servo1.write(90);

if(distance <=20)

{

servo1.write(270);

}

}

void ultra_sonic()

{

digitalWrite(trigPin, LOW);

delayMicroseconds(2);

digitalWrite(trigPin, HIGH);

delayMicroseconds(10);

digitalWrite(trigPin, LOW);

duration = pulseIn(echoPin, HIGH);

distance = duration*0.034/2;

}
```

Components:

1. Arduino uno
2. Ultrasound sensor
3. Servo motor
4. Jumper wires

About:

In this project when an obstacle will appear in a certain distance in front of the ultrasound sensor the servo will turn 90°. If the obstacle is removed it will rotate -90° again and come back to the past position.