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#include <Wire.h>
#include <LiquidCrystal_I2C.h>
#include<Servo.h>

Servo motor;
int ir = 10;
int ir1 = 8;
int ir2 = 9;
int led1 = 2;
int led2 = 3;
int led3 = 4;

LiquidCrystal_I2C lcd(0x27, 16, 2); // set the LCD address to 0x27
for a 16 chars and 2 line display

void setup() {
  lcd.init(); // initialize the lcd
  // Print a message to the LCD.
  lcd.init();
  lcd.backlight();
  lcd.setCursor(3,0);
  lcd.print("Count Down");
  pinMode(ir,INPUT);
  pinMode(ir1,INPUT);
  pinMode(ir2,INPUT);
  motor.attach(7);
  pinMode(led1,OUTPUT);
  pinMode(led2,OUTPUT);
  pinMode(led3,OUTPUT);
}

void loop() {

  if(digitalRead(ir) == LOW)
  {
    digitalWrite(led3,LOW);
    digitalWrite(led2,HIGH);
    digitalWrite(led1,HIGH);
  }
}

```

```

int count;
for( count=20;count>=0;count--)
{
    lcd.setCursor(3, 1);
    lcd.print("Time Left  ");
    lcd.setCursor(13, 1);
    lcd.print(count);
    delay(500);
    lcd.clear();
    lcd.setCursor(3, 0);
    lcd.print("Count Down");

}
lcd.clear();

}
else if(digitalRead(ir1) == LOW)
{
    lcd.clear();
    motor.write(115);
    digitalWrite(led2,LOW);
    digitalWrite(led3,HIGH);
    digitalWrite(led1,HIGH);
    lcd.setCursor(3, 0);
    lcd.print("GATE OPENED ");
    lcd.setCursor(5, 1);
    lcd.print("GO");

}
else if(digitalRead(ir2) == LOW)
{
    motor.write(10);
    digitalWrite(led2,HIGH);
    digitalWrite(led3,HIGH);
    digitalWrite(led1,LOW);
    lcd.clear();
    lcd.setCursor(3, 0);

```

```
        lcd.print("GATE CLOSED");  
lcd.setCursor(5, 1);  
lcd.print("STOP");  
    delay(1000);  
  
}  
  
}
```