

## **WiRobot**

### **Group Members**

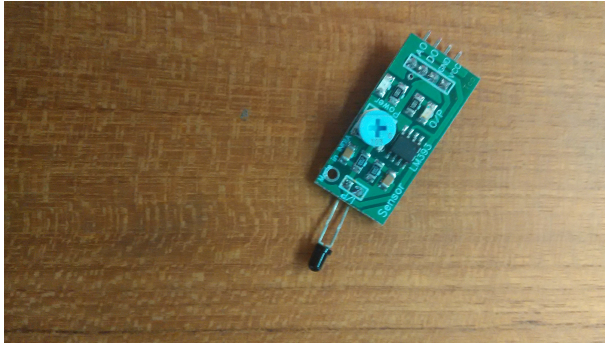
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## **List of components**

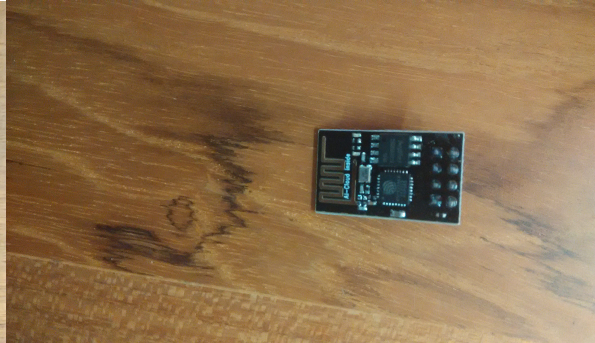
1. Wifi Modual ESP8266
2. Motor Driver L293D
3. AtMega16
4. Motors
5. LDR Sensor
6. Cart (Including 2 motors and 4 tyres)
7. LEDs

## Hardware Photos

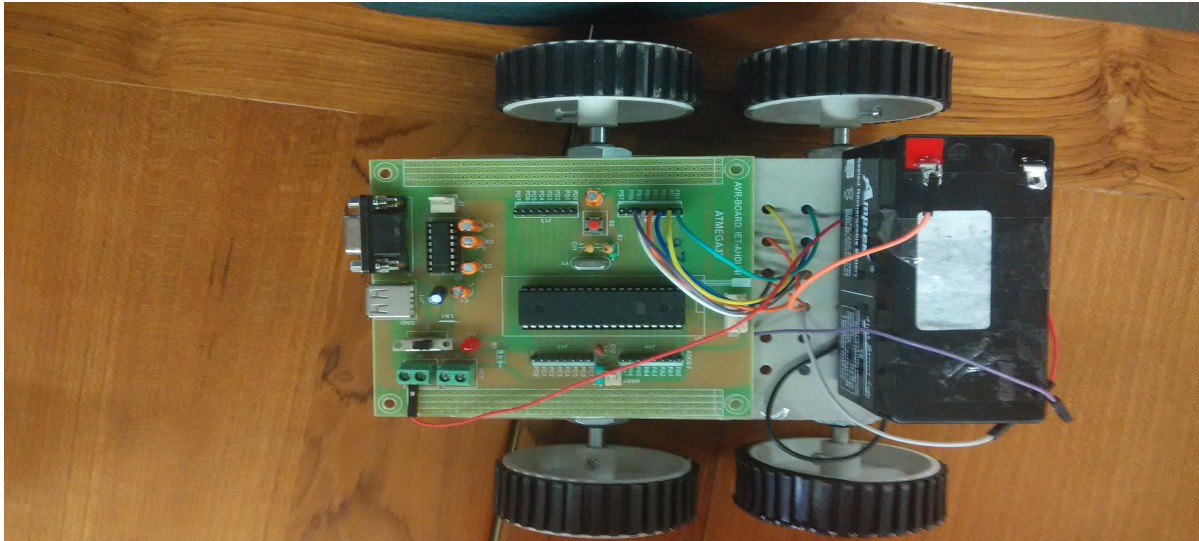
- LDR



- ESP8266



- Car



## Code

```
void main() {  
    int LDRvalue;  
    DDRB = 0x3F;  
    PORTB = 0X30; // To Enable the motor driver  
    while(1) {  
        LDRvalue = PIND.B0; // Storing the output of LDR sensor  
        if(LDRvalue == 0){  
            PORTD.B1 = 0;  
        }  
        else {  
            PORTD.B1 = 1;  
        }  
        //Forward direction  
        PORTB |= 0x0A;  
        Delay_ms(5000);  
        PORTB &= 0xF0;  
        Delay_ms(2000);  
        //BackWard diraction  
        PORTB |= 0x05;  
        Delay_ms(5000);  
        PORTB &= 0xF0;  
        Delay_ms(2000);  
    }  
}
```

```
//For left turn

PORTB |= 0x02;

Delay_ms(2000);

PORTB &= 0xF0;

Delay_ms(2000);

//For right turn

PORTB |= 0x08;

Delay_ms(2000);

PORTB &= 0xF0;

Delay_ms(2000);

}

}
```