

DESIGN CREDIT

# VOICE CONTROLLED HOME AUTOMATION

# WHAT ARE WE AIMING FOR?

## OBJECTIVE:

- Create a seamless and intuitive way to control various home devices and systems using voice commands.
- Enhance convenience and accessibility for users

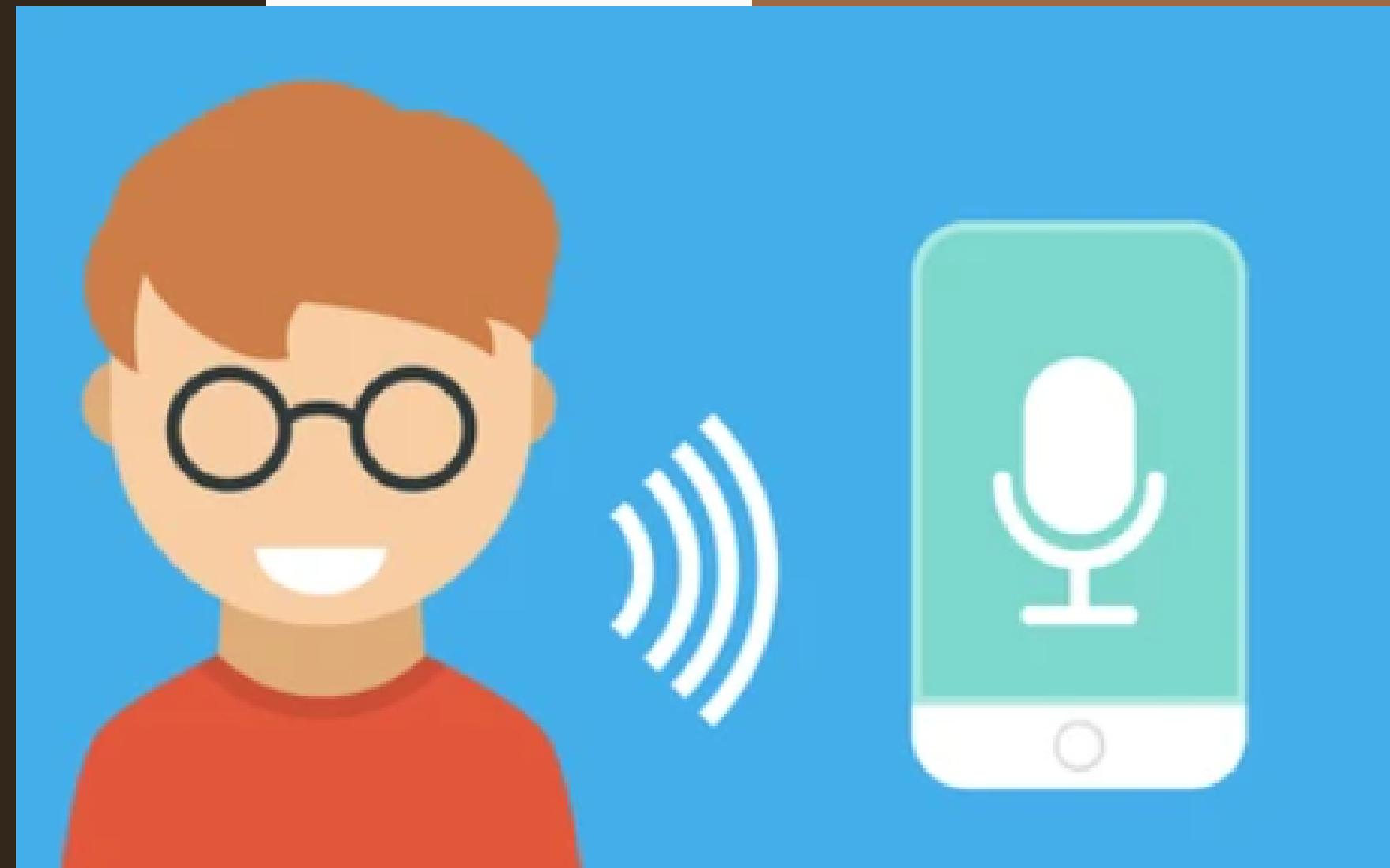


Source : Google images

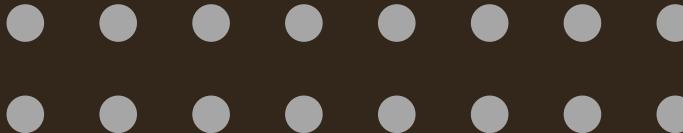
# METHODOLOGY

WE WERE TASKED WITH MAINLY 2 ASSIGNMENTS:

1. Local level voice control
2. Connection to a network for remote voice control



Source : Google images



# COMPONENTS WE USED:

## For the basic voice control circuit

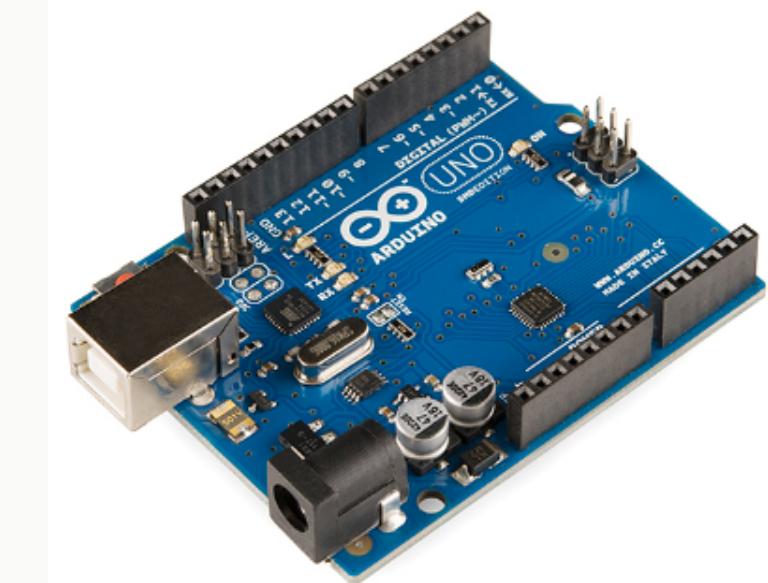
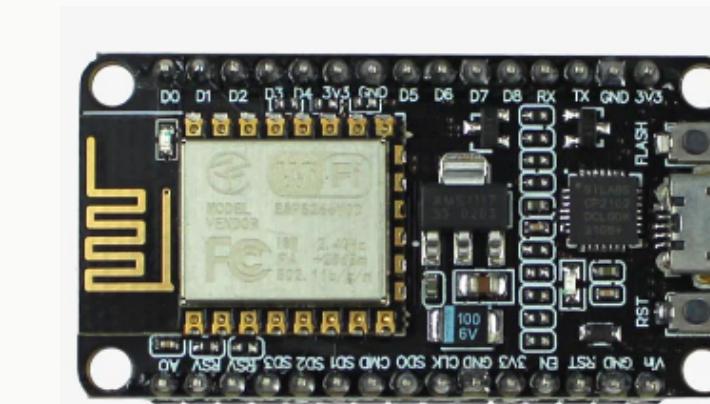
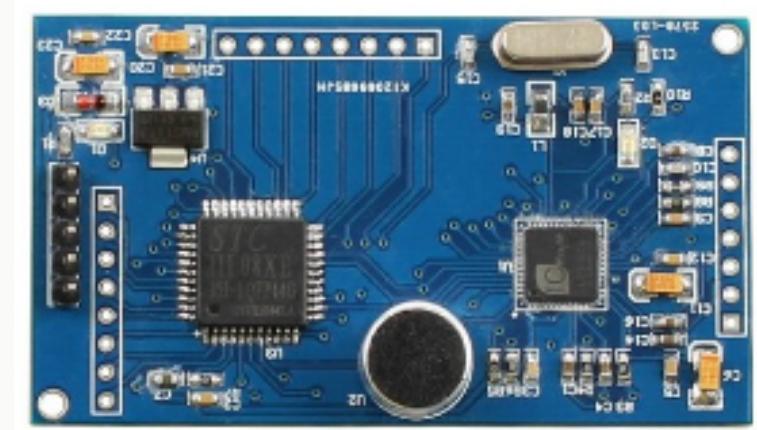
- Arduino Uno
- Voice control module (DFRobot DF2301QG)
- Breadboard
- LEDs

## Using Wi-Fi

- NodeMCU (ESP8266)
- 2-channel Relay Module 5V
- Bulb
- High voltage wire
- Breadboard
- LEDs
- Jumper wires

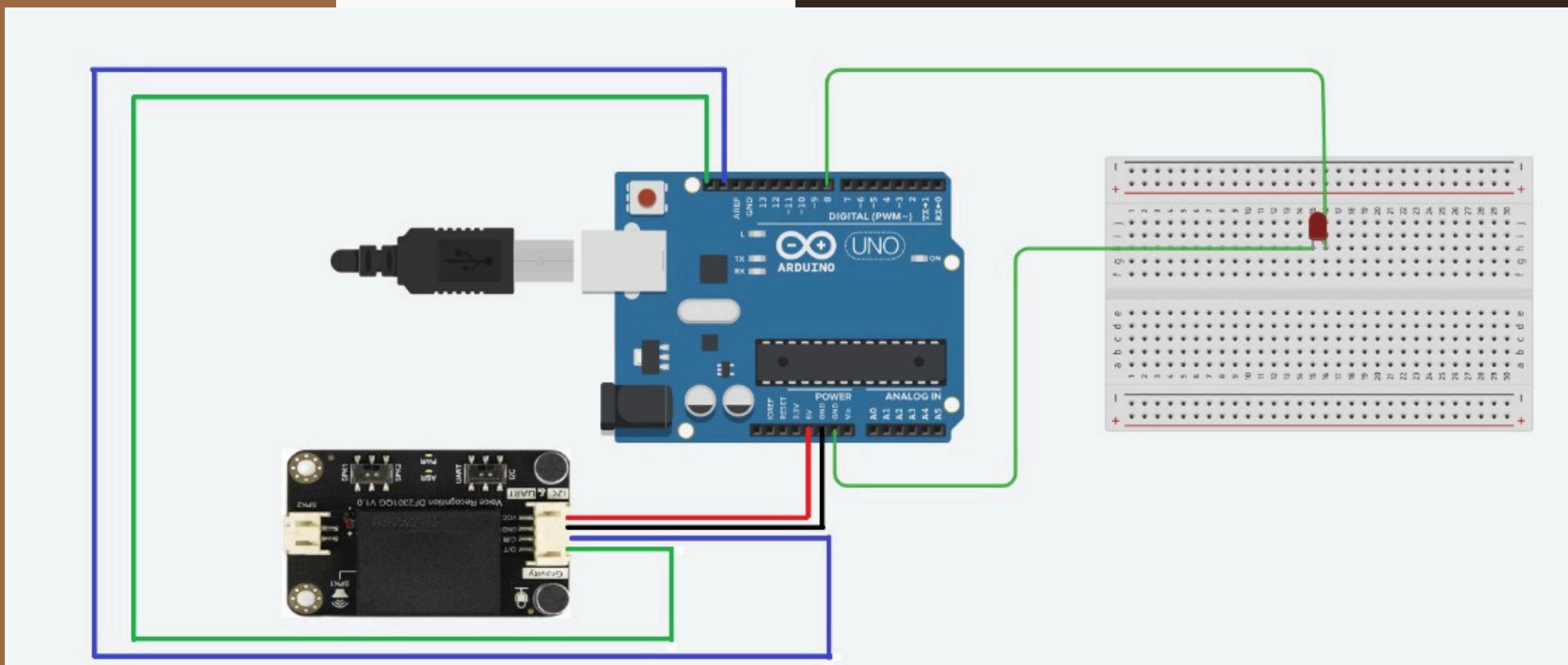


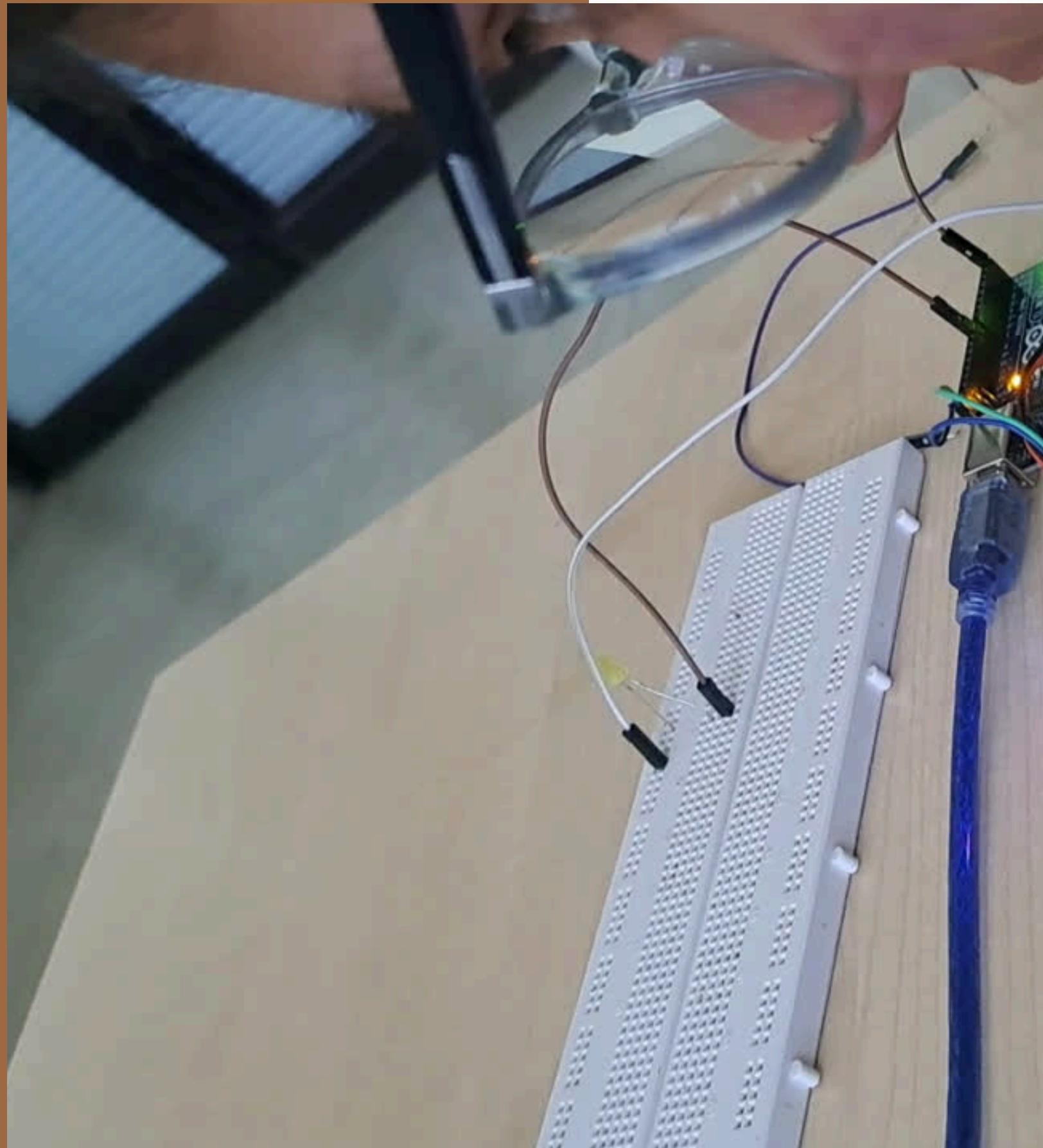
# COMPONENTS USED



Source : Google images

# CIRCUIT DIAGRAM: LOCAL VOICE CONTROLLED DEVICE





# VIDEO DEMONSTRATION



Source : Google images



Source : Google images

# Voice controlled appliances

- The Wi-Fi is connected with NodeMCU of the circuit.
- A relay module is used for regulating the voltage supplied.

## USING WI-FI

# Using Sinric Pro

- Sinric Pro is used for interfacing with the NodeMCU via Google Assistant or Amazon Alexa.
- This is used to eliminate the need of an exclusive app for the usage.

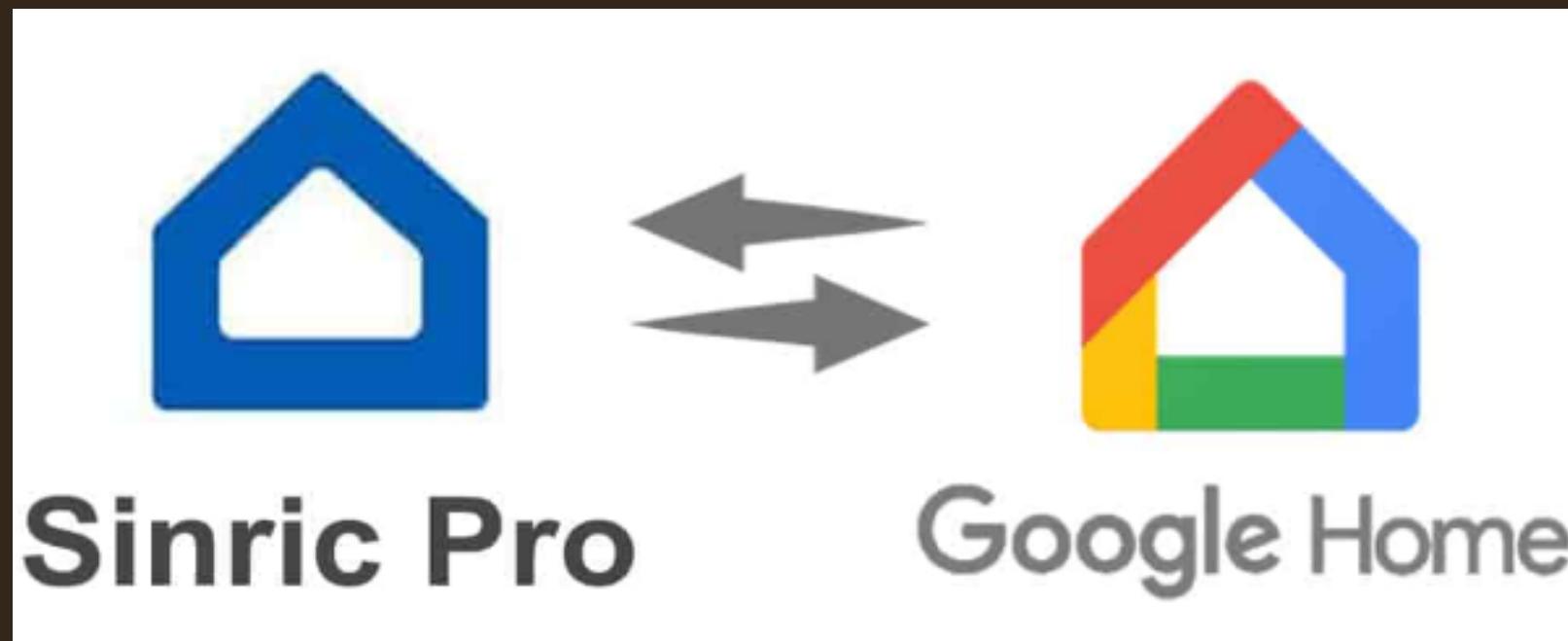
The screenshot shows the Sinric Pro web application interface. On the left is a sidebar with the following menu items:

- Dashboard
- Devices
- Automations
- Device Templates
- Credentials
- Rooms
- Homes
- Scenes
- Schedules

At the bottom of the sidebar is a "Collapse Sidebar" button. The main area is titled "Devices". It features a search bar at the top right with the placeholder "Search...". Below the search bar are three buttons: "+ Add Device", "New Subscription", and a refresh icon. The main content area is a table titled "Devices" with the following columns: DEVICE, DESCRIPTION, POWER STATE, ROOM, HOME, APP KEY, and LAST CONNE. There are two entries in the table:

DEVICE	DESCRIPTION	POWER STATE	ROOM	HOME	APP KEY	LAST CONNE
Project Light ID: 663349c6202b1b3e1f52a77a	Project Light	Off	Living Room	Home	default	
Room light ID: 6632131d4407be8cea59e146	Room light	Off	Living Room	Home	default	

# PLAN FOR VOICE INPUT



Source : Google images

```
// setup function for SinricPro
void setupSinricPro() {
    // add devices and callbacks to SinricPro
    pinMode(RELAYPIN_1, OUTPUT);

    SinricProSwitch& mySwitch1 = SinricPro[SWITCH_ID_1];
    mySwitch1.onPowerState(onPowerState1);

    // setup SinricPro
    SinricPro.onConnected([](){ Serial.printf("Connected to SinricPro\r\n"); });
    SinricPro.onDisconnected([](){ Serial.printf("Disconnected from SinricPro\r\n"); });
    SinricPro.restoreDeviceStates(true); // Uncomment to restore the last known state from the server.

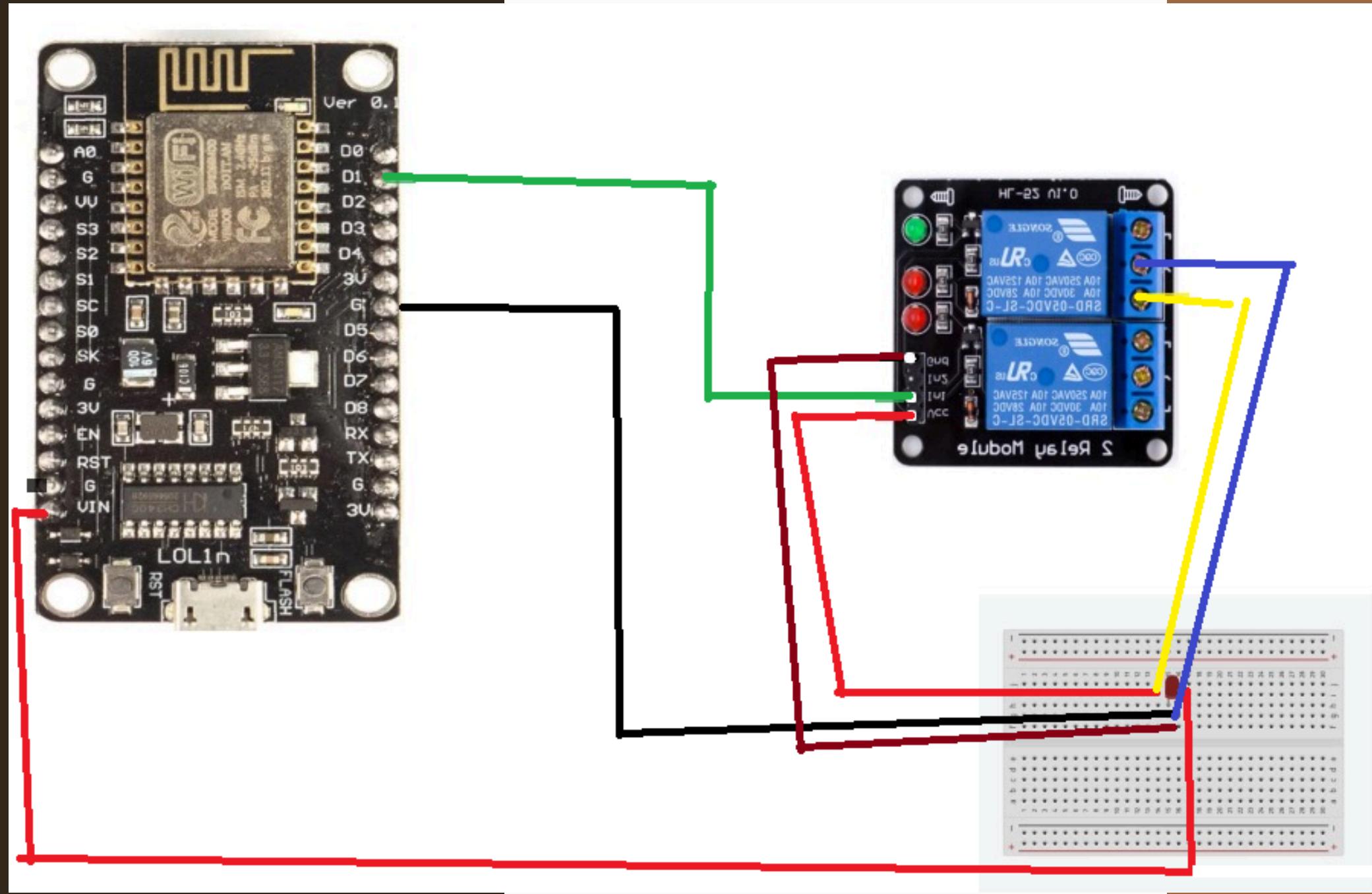
    SinricPro.begin(APP_KEY, APP_SECRET);
}

// main setup function
void setup() {
    Serial.begin(BAUD_RATE); Serial.printf("\r\n\r\n");
    setupWiFi();
    setupSinricPro();
}

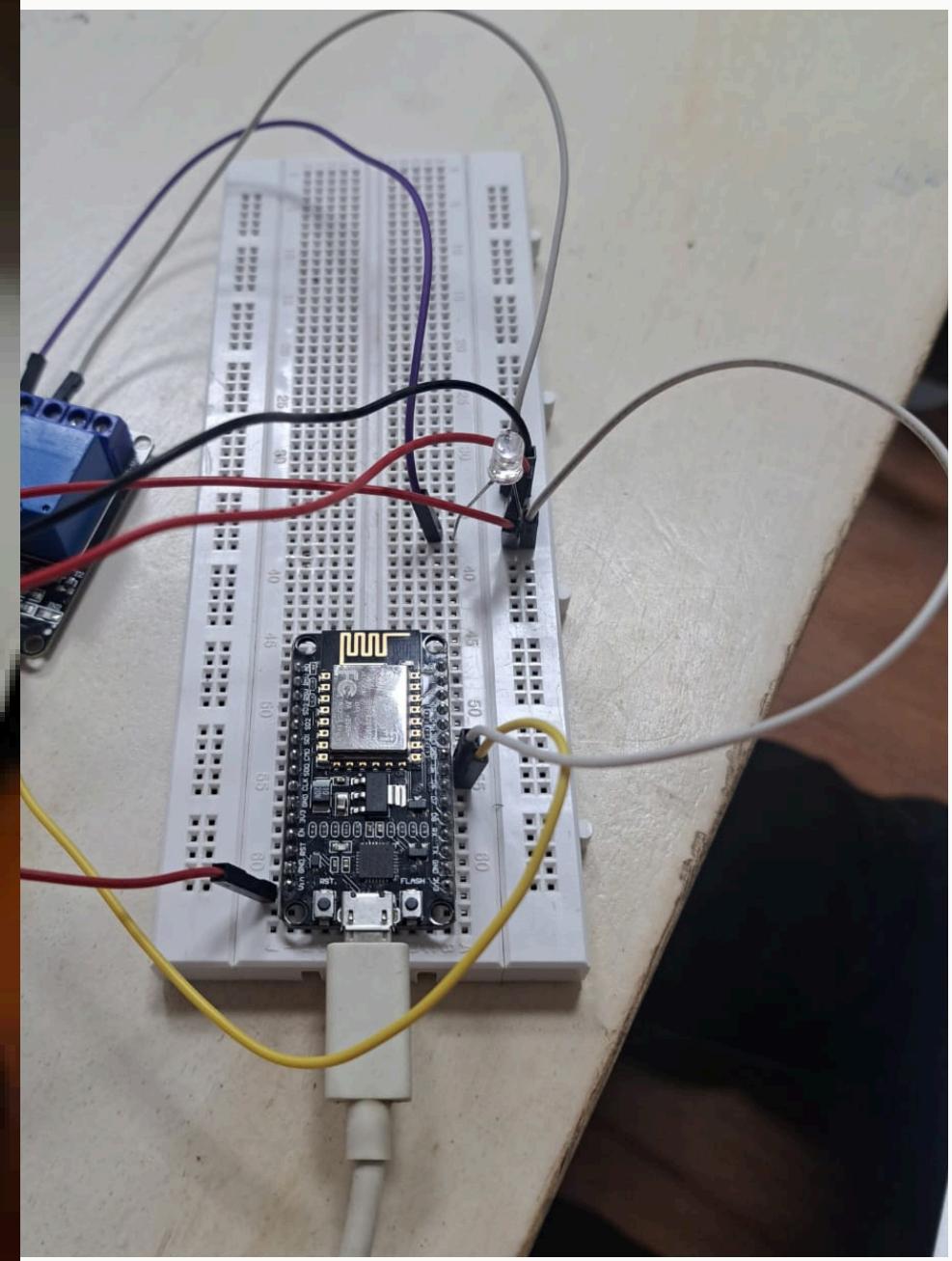
void loop() {
    SinricPro.handle();
}
```

**Code snippet for Sinric Pro**

# CIRCUIT DIAGRAM



# VIDEO DEMONSTRATION



# MEMBERS

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# THANK YOU



Source : Google