

CS226 Lab Report for Part B

HOME AUTOMATION USING GOOGLE ASSISTANT

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Introduction:

Ever thought of a life where you could just command your home appliances to work as you need just by using your voice? Gone are the days where you have to be a billionaire like Tony Stark to have an automated house which is voice activated. Here we have made how we can control our electronic appliances like T.V, fans, lights etc over the internet with your voice and that to under a budget of \$20.

Goal:


Making Home Automation to control different Appliances using our own customizable voice commands using google assistant.

Things Required:

- NodeMCU
- Relay Board
- Jumper Cables
- Bread Board
- Arduino UNO
- Smartphone

Steps:

- I. Download and install the Blynk app on your smartphone.
- II. Download Arduino IDE and install Blynk Libraries on your laptop.
- III. Configure Arduino IDE to use Blynk Libraries.
- IV. Go to Files > Examples > Blynk > Boards_WIFI > ESP8266_Standalone. A new file will open.



```
ESP8266_Standalone | Arduino 1.8.3 (Windows Store 1.8.6.0)
File Edit Sketch Tools Help

ESP8266_Standalone$
//***** BLINK_PRINT_SERIAL *****/

#include <ESP8266WiFi.h>
#include <BlynkSimpleEsp8266.h>

// You should get Auth Token in the Blynk App.
// Fill out your auth token here!
char auth[] = "9f3a1b2c3d4e5f67890123456789012345678901234567890123456789012345";

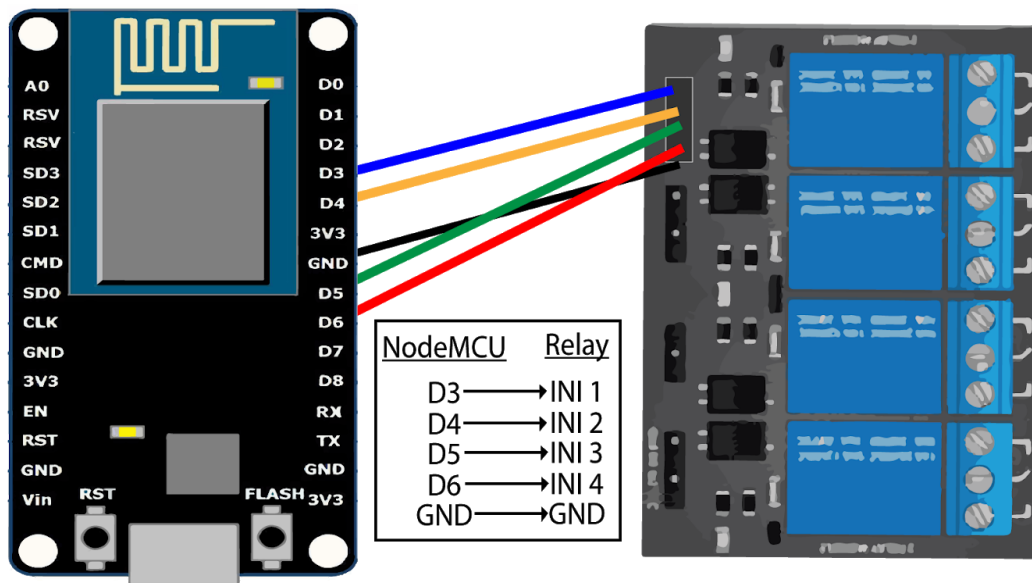
// Your WiFi credentials.
// Set password to "" for open networks.
char ssid[] = "The Network";
char pass[] = "abcd1234";

void setup()
{
  // Debug console
  Serial.begin(9600);

  Blynk.begin(auth, ssid, pass);
}

void loop()
{
  Blynk.run();
}
```

V. Connect the wires as shown in the figure.



VI. Connect Google Assistant using IFTTT to make the NodeMCU work with voice commands.

VII. We can set commands according to our needs.

VIII. Enjoy the project by controlling the 4 relays using Google assistant as well as Blync app.

Link To Video Demonstration:

https://drive.google.com/file/d/14GzRLOZli6lxx_GFZasjoWhEHd3_yrQo/view?usp=sharing