ROBOTiX CLUB
National Institute of Technology
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Project Name - Home Automation

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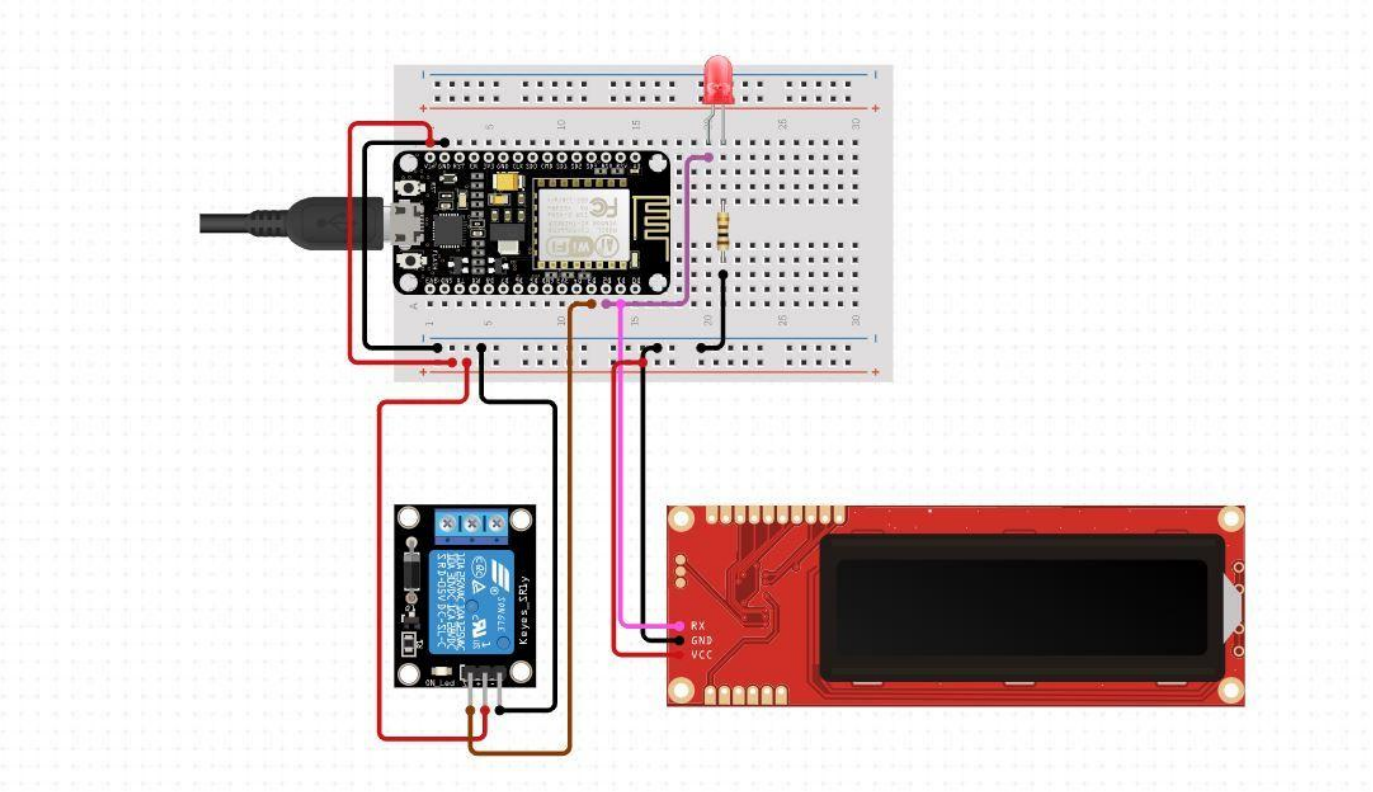
1. Introduction

Home Automation is a project that works on IoT with the help of ESP8266 NodeMCU, Blynk app and relay to switch on any AC home appliance. The project also displays the status of different appliances on an LCD screen display.
IFTTT to send notifications to your Smartphone such as opening of door or any other suspicious activity.

2. Blueprints



3. Working

Works on the principle of IoT as shown in the following flowchart:

4. Construction

1. Download **Blynk_Release_vXX.zip** (scroll down to the Downloads section)
2. Unzip the archive. You will notice that archive contains several folders and several libraries.
3. Copy all of these libraries to **your_sketchbook_folder** of Arduino IDE. To find the location of **your_sketchbook_folder**, go to top menu in Arduino IDE:

Windows: File → Preferences
Mac OS: Arduino → Preferences

To setup Blynk App, you should follow the steps below:

1. Download the Blynk app on your Smartphone and create an account.

   To do this: Download Blynk app:
   - iOS: https://apps.apple.com/us/app/blynk-control-arduino-raspberry/id808760481?ls=1
   - Android: https://play.google.com/store/apps/details?id=cc.blynk

2. Create a new project; select from the list your hardware (NodeMCU).
3. Select connection type (USB, Wifi, Bluetooth)
4. Add a widget to your control panel by clicking on the plus icon on the top right.
5. Select the Button widget, and double tap on it to edit its settings.

About the code

```
#define BLYNK_PRINT Serial
#include <esp8266wifi.h>
#include <BlynkSimpleEsp8266.h>


/// You should get Auth Token in the Blynk App.
// Go to the Project Settings (nut icon).

char auth[] = "YourAuthToken";

// Your WiFi credentials.
// Set password to "" for open networks.
```

```
char ssid[] = "YourNetworkName";
char pass[] = "YourPassword";

void setup()
{
  // Debug console
    Serial.begin(115200);
    Blynk.begin(auth, ssid, pass);
}

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

Blynk's Configuration