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## **Quick Start to Nodemcu (ESP8266) on Arduino IDE**

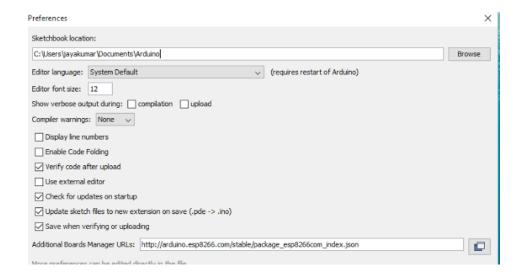
Thanks to the guys those who ported the Esp8266 into Arduino IDE and helping all the arduino users happy to the core. Yes it's been long time since they did and this post is bit later to thanks the good hearted work by the guys out there.

Lets begin with Installing the Esp8266 support for the Arduino and see how to blink an LED ( the hello world in the electronics )

check out the video to know step by step tutorial on how to get started with our favourite chip Esp8266

Firstly open the Arduino IDE

Go to files and click on the preference in the Arduino IDE

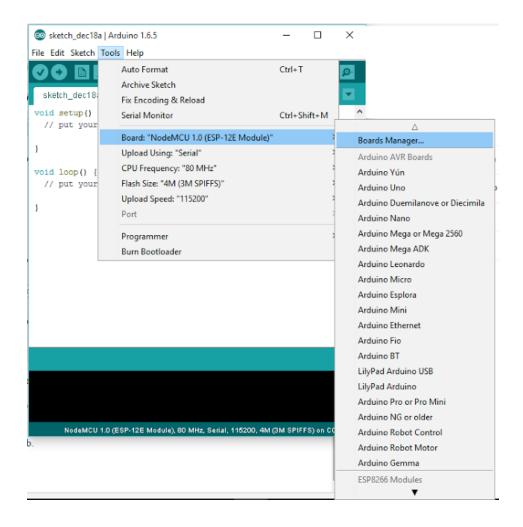




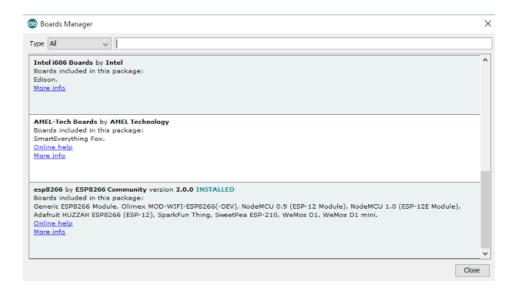
copy the below code in the Additional boards Manager

http://arduino.esp8266.com/stable/package\_esp8266com\_index.json

click OK to close the preference Tab.

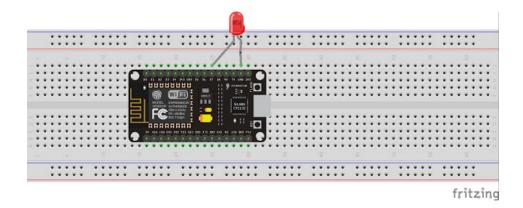


After completing the above steps , go to Tools and board, and then select board Manager



Navigate to esp8266 by esp8266 community and install the software for Arduino.

Once all the above process been completed we are read to program our esp8266 with Arduino IDE.



For this example I have used NodeMCU esp8266 and if you are using any other vendor wifi chips or generic wifi module please check with the esp8266 Pin mapping which is very essential to make things works.

The reason why I used D7 pin for this example is, I uploaded the basic blink program that comes with the examples program in the

arduino IDE which is connected with 13 pin of arduino. The 13th pin is mapped into D7 pin of NodeMCU.

go to board and select the type of esp8266 you are using. and select the correct COM port to run the program on your esp8266 device.

```
void setup() {<br/>// initialize digital pin
13 as an output.
 pinMode(13, OUTPUT);
}// the loop function runs over and over
again forever
void loop() {
 digitalWrite(13, HIGH);
                          // turn the LED on
(HIGH is the voltage level)
 delay(1000);
                           // wait for a second
 digitalWrite(13, LOW);
                           // turn the LED off
by making the voltage LOW
                           // wait for a second
 delay(1000);
}
```

upload the program and see the results.

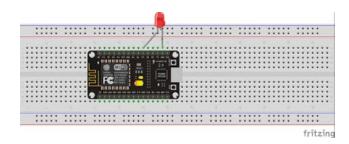
if you like the above tutorial and if you want try out with cool projects you can also check this link <a href="here">here</a>, that's the amazon book link where you can use that book to make IoT with Esp8266 or Nodemcu, that books gives you basic coverage on how to do simple things and get yourself started with arduino and goes on developing projects like sending data to webserver and creating a webserver, uploading and controlling data from a webpage, how to interface TFT LCD and I2C devices and many more things can find on the link.

In this blog, we will see How to "Turn On and Turn Off" an LED that has connected to the Esp8266, the esp8266 has programmed from Arduino IDE to control the LED.

We will connect the Esp8266 to the Wi-Fi router using SSID and password of our Home network Wifi, where the esp8266 connect to our wifi and create a webserver, which can be accessed by looking through the serial Monitor of the Arduino window or you can also log into your Wifi router and check for the list of clients connected to your Wi-Fi router.

Here's a window which explains the step by step procedure to connect the Esp8266 to the Wi-fi server and How to access the Webpage and control the LED connected to the Esp8266

For the above video I have used NodeMcu, you can use any type of Esp8266 to make this thing work in your web browser.



look for the mapping of pins in with your Esp8266 vendor, if the program not working properly for you, the fault will be with the pin mapping functionalities, Here I used the D7 pin which mapped to 13th pin when program from the Arduino IDE.

Connect your Esp8266 to Arduino IDE and Select the correct COM Port and board type and

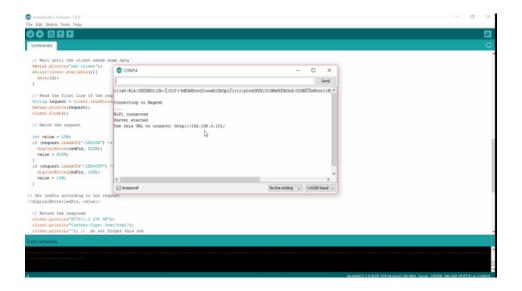
upload the program.

Note change the SSID to your WiFi Name and password to your Wifi password. if you forget to change it , esp8266 will not connect connect your wifi.

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If everything completed you can turn to your serial monitor and check for the ip address that your devices has connected to . you will presented with an serial monitor that look exactly to the picture below.



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