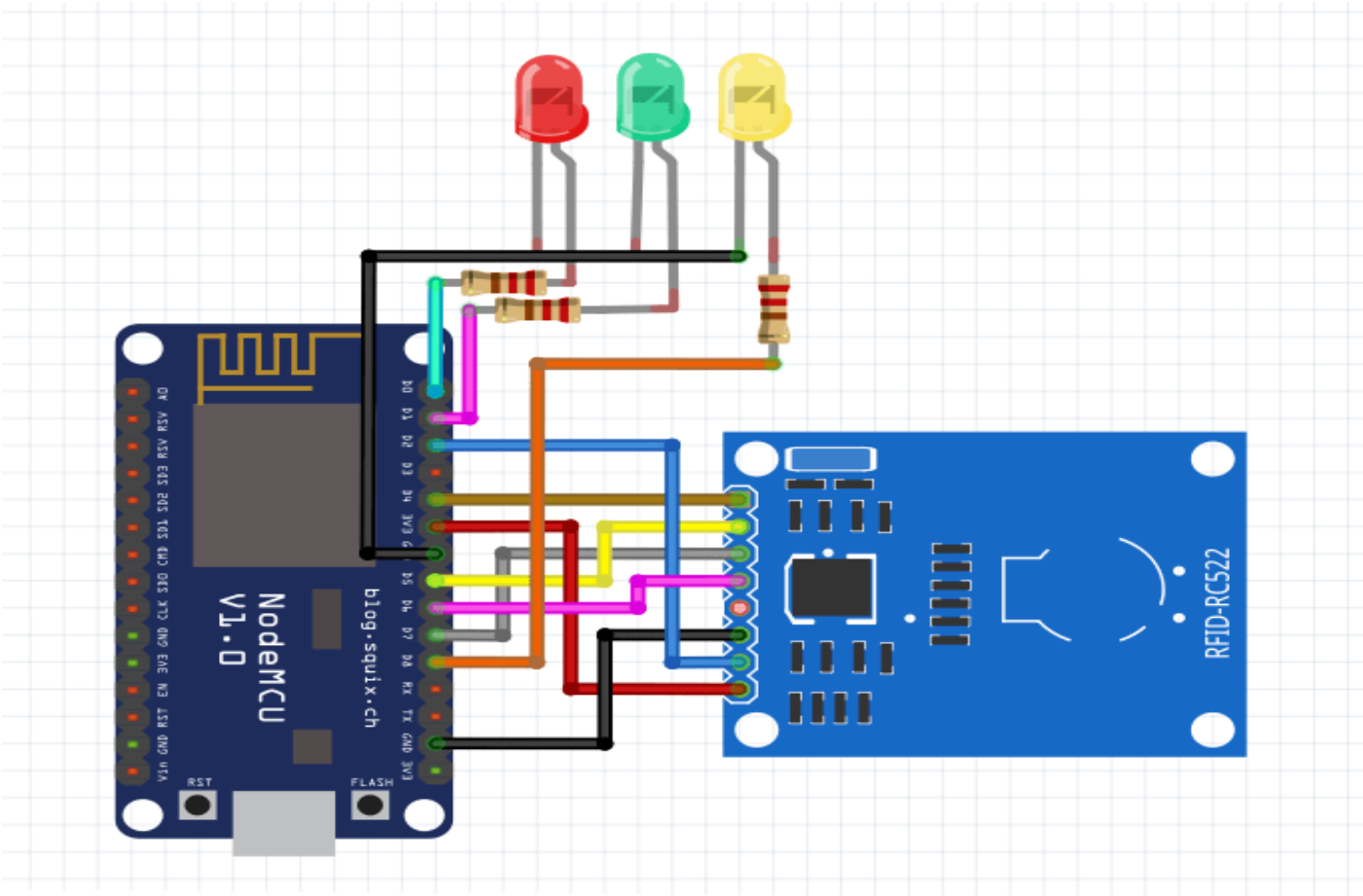
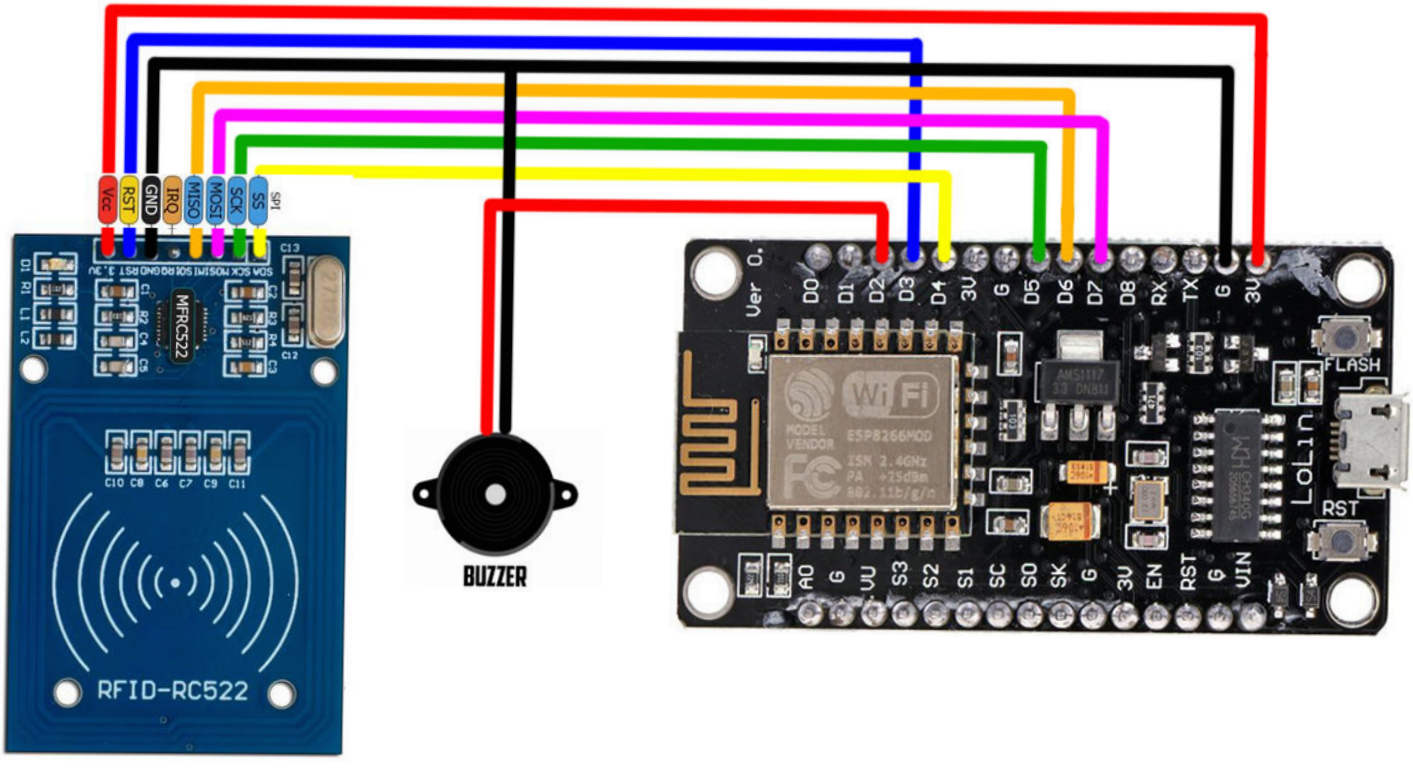
CONNECTING RFID SCANNER TO PHP USING NODEMCU WIFI MODULE





Requirements

- NodeMcu Wifi Module or cellphone hotspot
- RFID-RC522
- Arduino RFID Library for MFRC522 (SPI)
- Arduino IDE
- Arduino Core for NodeMCU ESP-12E Using Arduino Boards Manager
- Led Lights
- 220 Ohm to 1000 ohm resistor
- Jumper Wires
- XAMPP

After preparing the requirements, connect your RFID RC522 to your NodeMcu. Follow the diagram below:

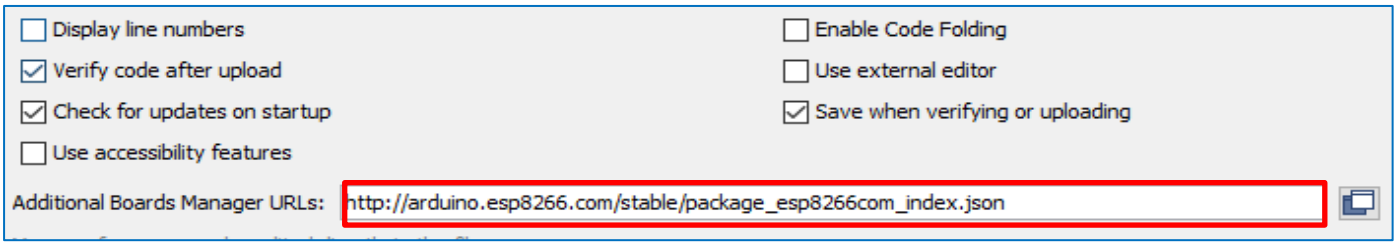
RFID	NodeMcu
3.3V	3.3V
RST	D2
GND	GND
MISO (Master-in, Slave out.)	D6
MOSI (Master Out Slave In)	D7
SCK (Serial Clock)	D5
SDA (Serial Data)	D4

- Yellow light will serve as an indicator that we have successfully connected to wifi or HotSpot.
- Green indicates that the request to the server has been sent successfully.
- Red light indicates that our HTTP request failed / our server did not return "success".

Led Pin	NodeMcu
Led w/ 220ohm Resistor (Red)	D0
Led w/ 220ohm Resistor (Green)	D1
Led w/ 220ohm Resistor (Yellow)	D8

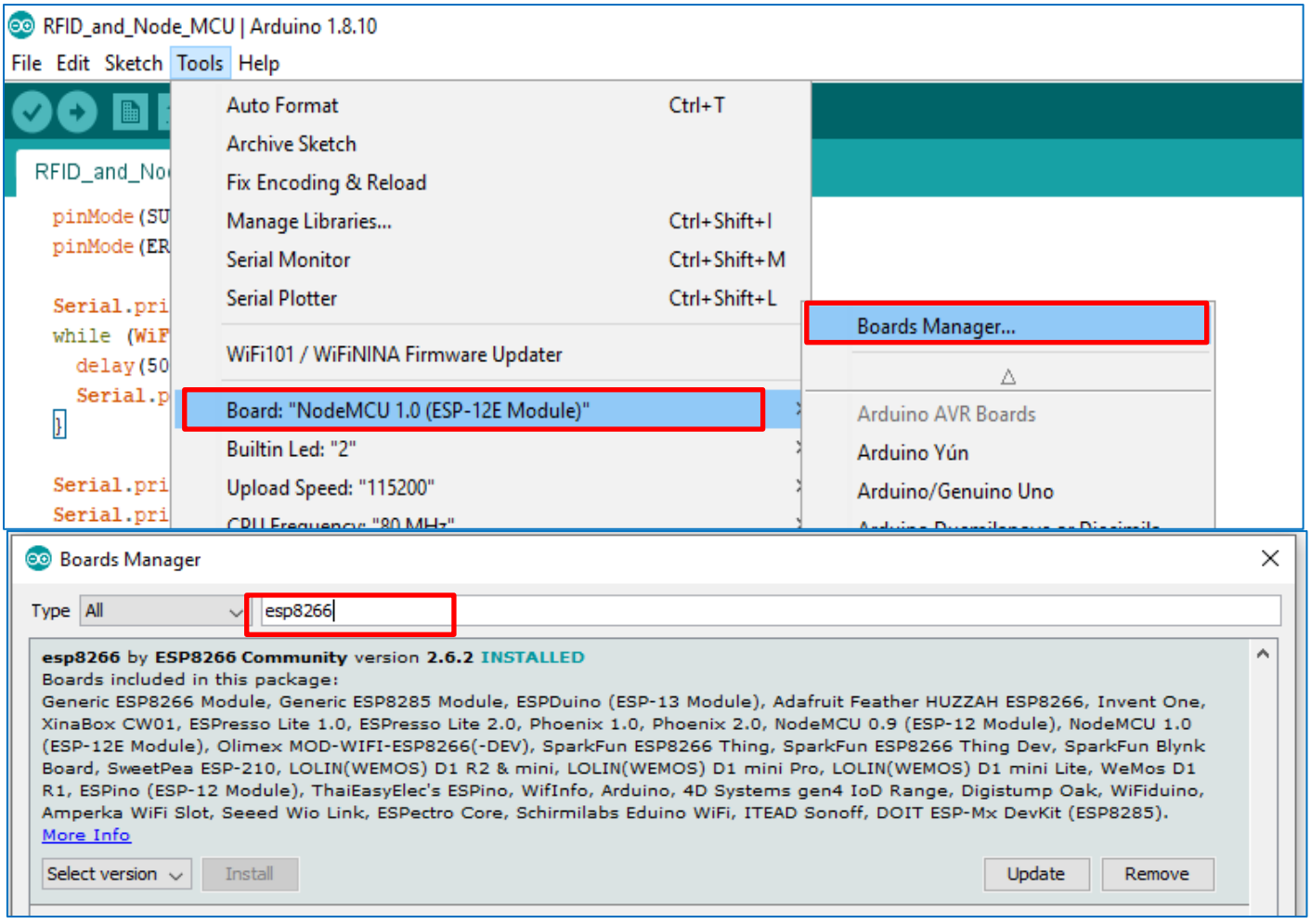
1. Setting up Arduino and adding RFID Library

- We need to add **esp8266** to our Arduino IDE. Open up your IDE then go to "**File** -> **Preferences**" or simply hit "Ctrl + comma"



Paste http://arduino.esp8266.com/stable/package_esp8266com_index.json in additional board manager URLs.

2. Go to "Tools -> Board -> Boards Manager" search and install **esp8266**

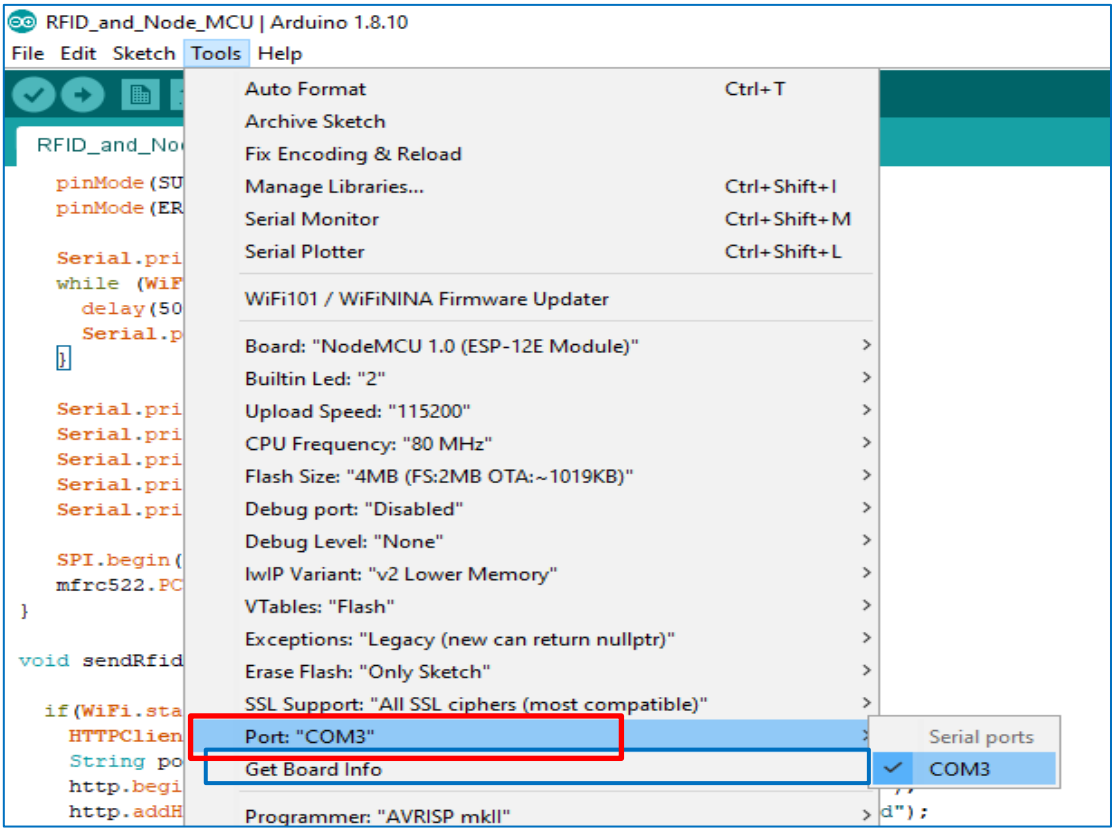


Close and restart your Arduino IDE

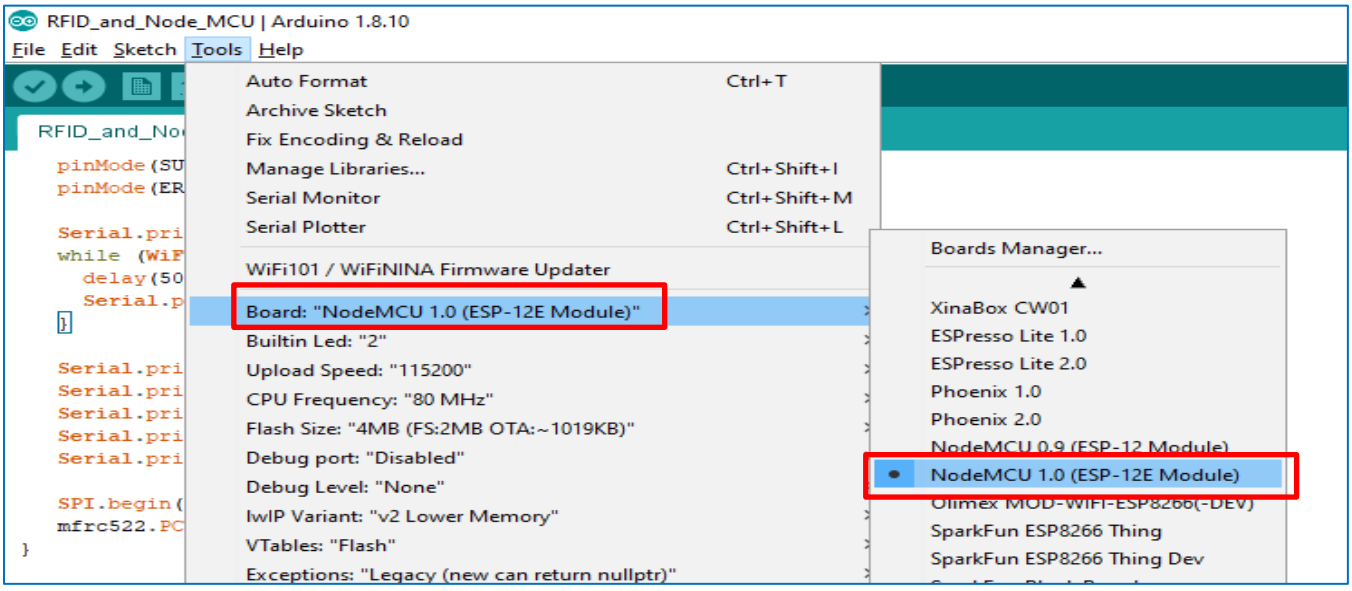
Plug in your NodeMcu to your computer. You will notice that your RFID scanner will light up and wait until connected!

3. Selecting Port and Board

Go to Tools -> Port and select the COM Port of your NodeMCU. If you are not sure what port your of your NodeMcu is plugged in, go to Device Manager -> Ports (COM & LPT)



4. Now select NodeMcu 1.0 (ESP-12E Module) by clicking Tools -> Board. Scroll down.



Restart your Arduino IDE