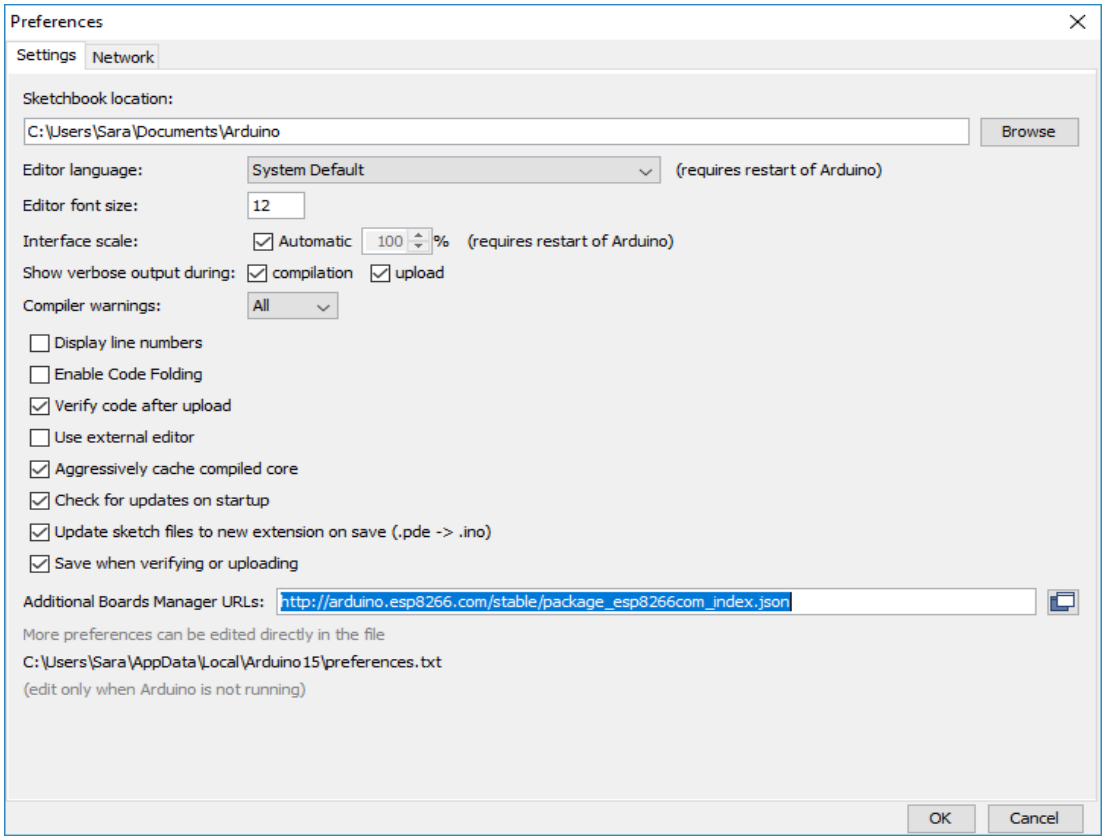
Prepare the Arduino IDE

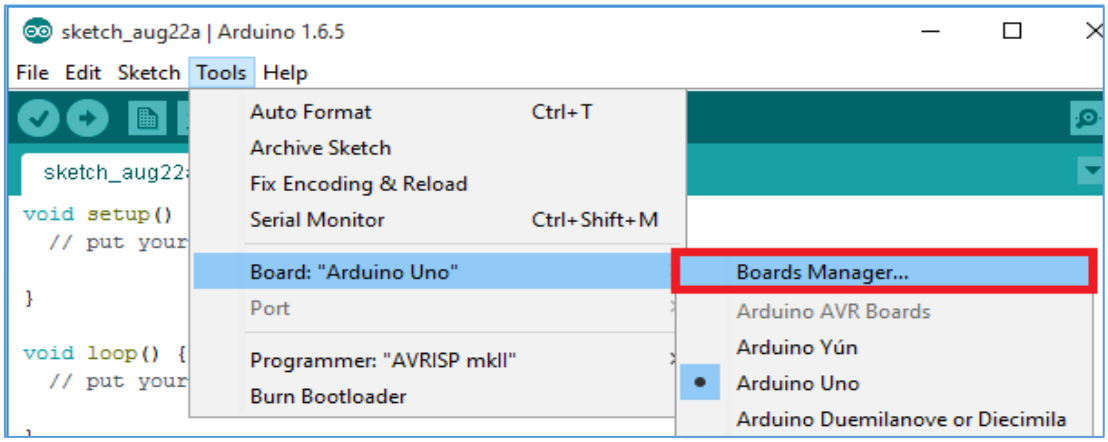
1. Download and install the Arduino IDE on your operating system

2. Then, you need to install the ESP8266 add-on for the Arduino IDE.
Go to **File > Preferences.**

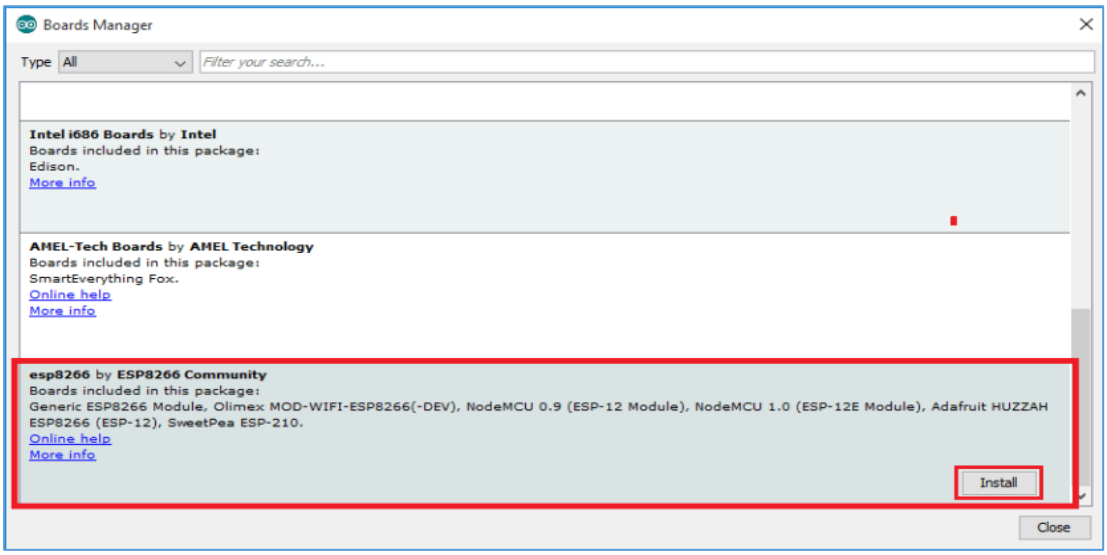
3. Enter **http://arduino.esp8266.com/stable/package_esp8266com_index.json**
into the **"Additional Board Manager URLs"** field as shown in the figure below.
Then, click the **"OK"** button



4. Go to **Tools > Board > Boards Manager…**



5. Scroll down, select the ESP8266 board menu and install **“esp8266 by ESP8266 Community”**

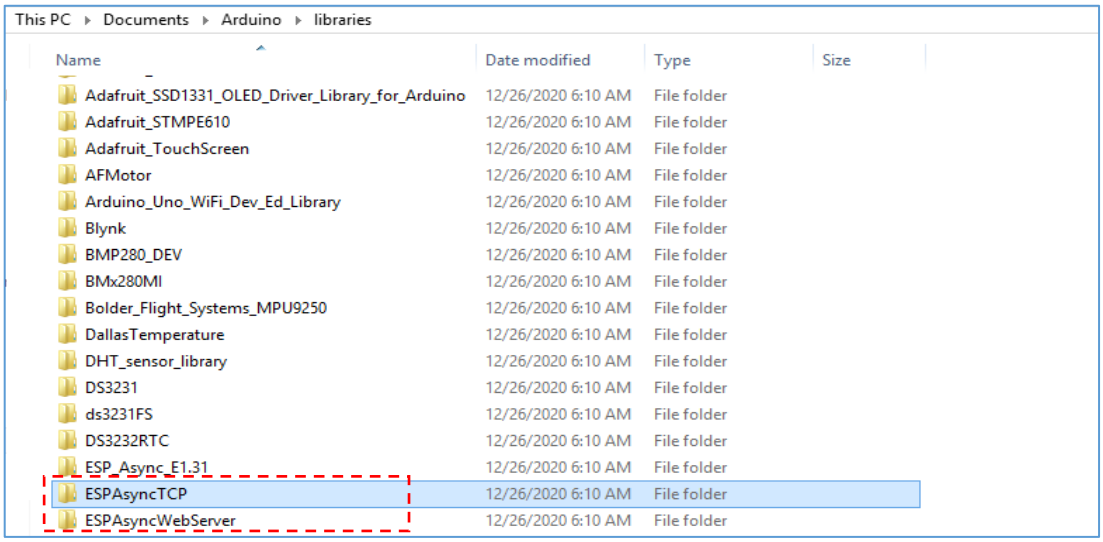


6. Go to **Tools > Board** and choose your ESP8266 board. Then, re-open Arduino IDE.

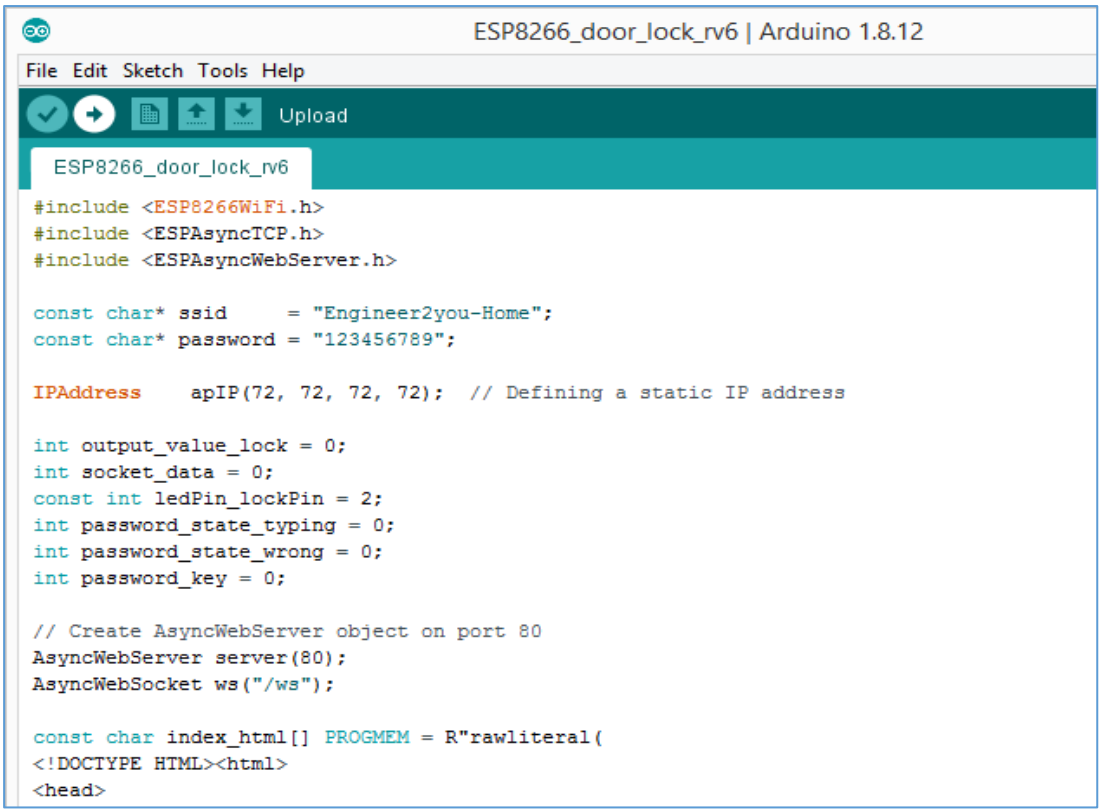
Installing Libraries – Async Web Server

ESPAsyncWebServer
ESPAsyncTCP
https://drive.google.com/drive/folders/1VTgMdVMUwMfgaHR_b4LRpA5ckQuYwwIn?usp=sharing

Copy those two library into IDE Library

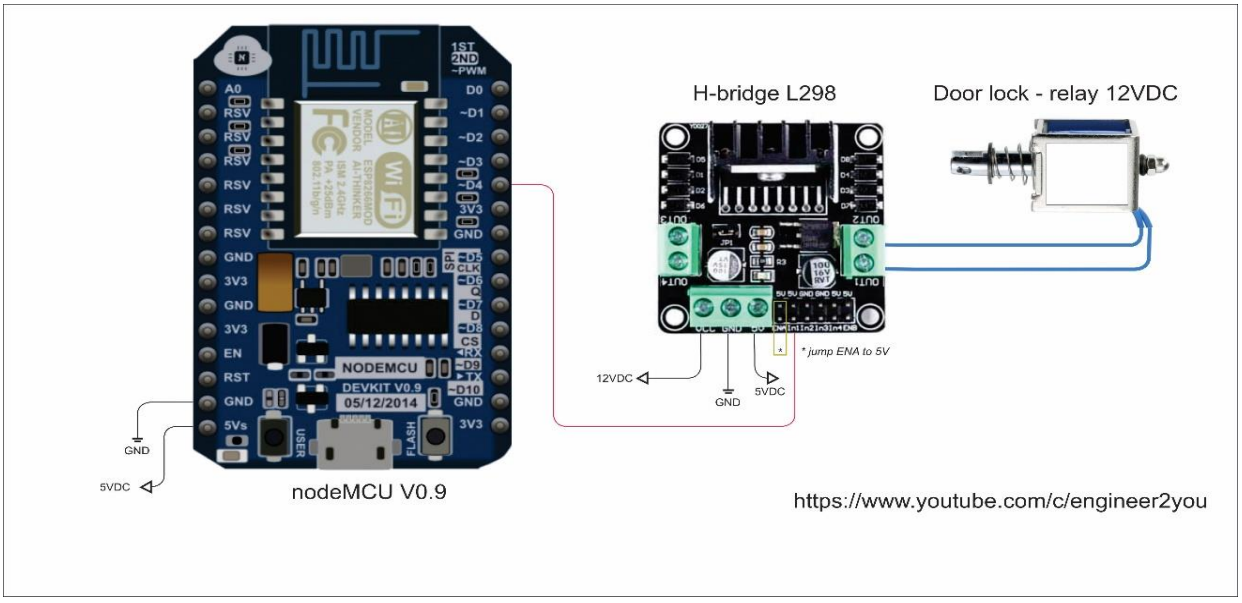


Download the code for ESP8266




```
#include <ESP8266WiFi.h>
#include <ESPAsyncTCP.h>
#include <ESPAsyncWebServer.h>

const char* ssid     = "Engineer2you-Home";
const char* password = "123456789";

IPAddress    apIP(72, 72, 72, 72);  // Defining a static IP address

int output_value_lock = 0;
int socket_data = 0;
const int ledPin_lockPin = 2;
int password_state_typing = 0;
int password_state_wrong = 0;
int password_key = 0;

// Create AsyncWebServer object on port 80
AsyncWebServer server(80);
AsyncWebSocket ws("/ws");

const char index_html[] PROGMEM = R"rawliteral(
<!DOCTYPE HTML><html>
<head>
```

Make the circuit



Note: you can replace H-bridge by Transistor or another module to control the Relay

Make QR code for door

Go to this URL to make your own QR code address for door
https://www.qr-code-generator.com/solutions/wifi-qr-code/