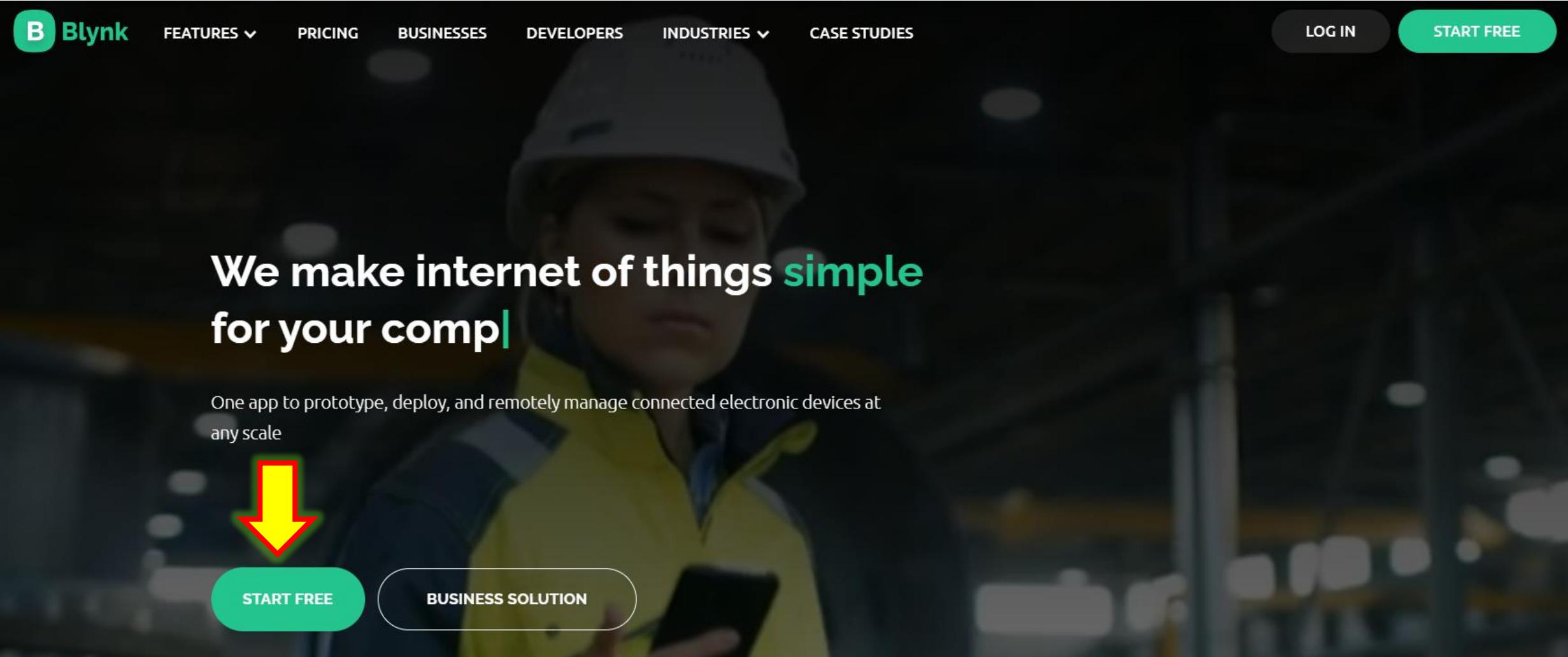


Blynk

<https://blynk.io/>

The image shows the Blynk website homepage. At the top, there is a navigation bar with the Blynk logo, 'FEATURES', 'PRICING', 'BUSINESSES', 'DEVELOPERS', 'INDUSTRIES', 'CASE STUDIES', 'LOG IN', and a green 'START FREE' button. Below the navigation bar is a large banner featuring a construction worker wearing a hard hat and safety vest, looking at a smartphone. The background is a blurred industrial or construction site. Overlaid on the image is the text 'We make internet of things simple for your compl'. Below this, a smaller text reads 'One app to prototype, deploy, and remotely manage connected electronic devices at any scale'. At the bottom left, there is a red arrow pointing down to the 'START FREE' button, which is highlighted with a red border. Next to it is another button labeled 'BUSINESS SOLUTION'.

We make internet of things **simple**
for your compl

One app to prototype, deploy, and remotely manage connected electronic devices at
any scale

START FREE

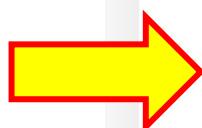
BUSINESS SOLUTION



Sign Up

Welcome! Fill in your email address and we will send an account activation link.

EMAIL

 ...

I agree to [Terms and Conditions](#) and accept [Privacy Policy](#)

Sign Up

[Back to Login](#)



Sign Up

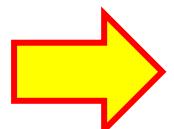
Welcome! Fill in your email address and we will send an account activation link.

EMAIL

koson.trachu@gmail.com

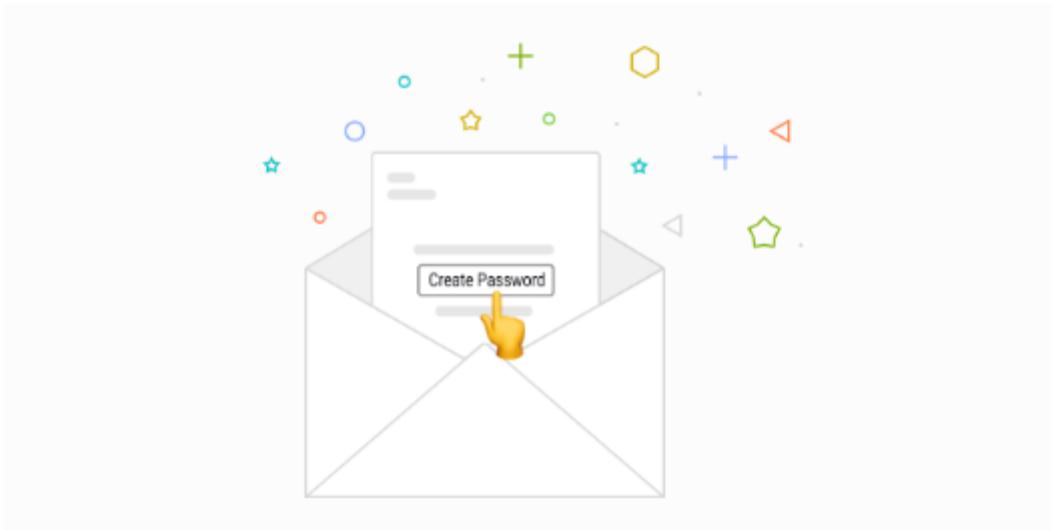


I agree to [Terms and Conditions](#) and accept [Privacy Policy](#)



Sign Up

[Back to Login](#)



Confirm Your Email Now

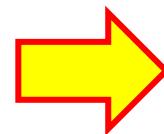
Check your inbox for an email from **Blynk**

Click on the link there to confirm your email.

Don't see the email?

Search SPAM folder for an email from **Blynk**

Also add it to your address book.



[Check Email inbox](#)

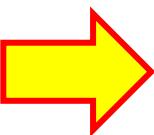
Email message



Welcome!

We're excited to see you on board.

To get started, you'll need to create a password for your account.



Create Password

The link will expire in 1 hour.

Thank you.



Create Password

Create a password which is hard to guess.

1

PASSWORD

 •••••••• ... eye

Great

- Make it at least 8 symbols long
- Other tips:
- Use uncommon words
- Use non-standard uPPercaseing
- Use creative spelling
- Use numbers & symbols

2

Log In

Next

Blynk Tour

- 1 Welcome
- 2 Platform
- 3 Modes
- 4 Devices
- 5 Template
- 6 Template components
- 7 Features

Hi Blynker!

You've just joined the community of more than 500,000+ developers building amazing IoT products and projects.

With Blynk you can connect your devices to the Internet and create mobile and web dashboards to control your devices from anywhere in the world.

Let's save your learning time with a few quick steps.



Skip

Let's go!

Blynk Tour

1 Welcome 2 Platform 3 Modes 4 Devices 5 Template 6 Template components 7 Features

Platform

Blynk platform consists of four main components that work seamlessly together:

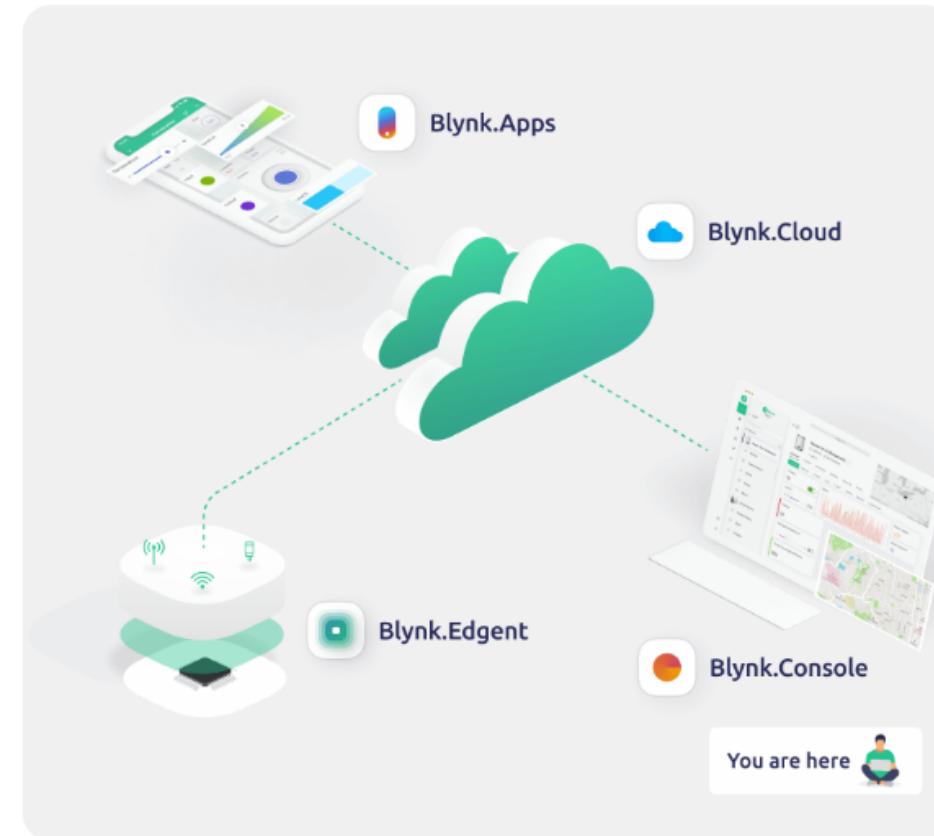
Blynk.Edge: software that runs on your device and communicates with Blynk.Cloud.

Blynk.Console: web application where you can configure, connect, oversee your devices, analyze sensor data, update firmware OTA, and manage how other users and organizations access their devices.

Blynk.Apps: mobile apps for iOS and Android where you can build UI for your devices with no coding, and share it with other users.

Blynk.Cloud: server that securely sends data between your devices and apps.

[More info here →](#)



← Back

Cancel

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Blynk Tour

✓ Welcome — ✓ Platform — 3 Modes — 4 Devices — 5 Template — 6 Template components — 7 Features

Developer Mode and User Mode

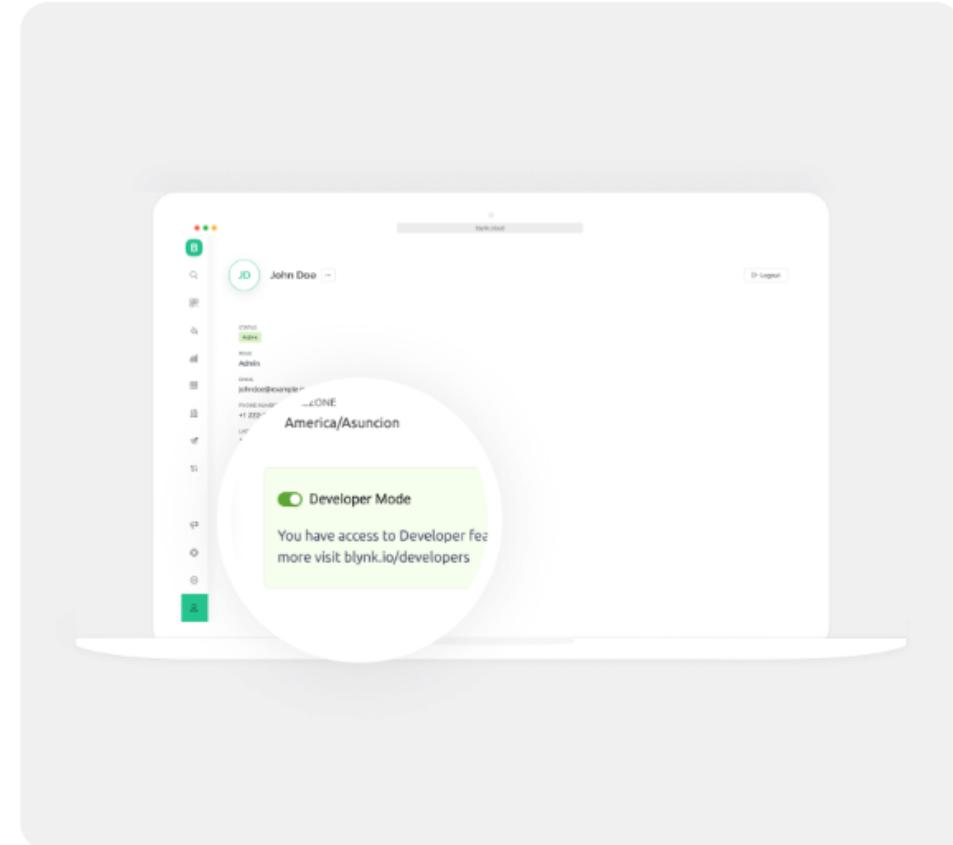
Blynk operates in 2 modes:

Developer Mode (which you are currently using), allows you to configure how devices should work.

User Mode allows to monitor and control the devices, but doesn't allow to modify any configurations.

You can switch the Developer Mode on/off in User Profile section of the main menu.

[More info here →](#)



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Blynk Tour

✓ Welcome — ✓ Platform — ✓ Modes — 4 Devices — 5 Template — 6 Template components — 7 Features

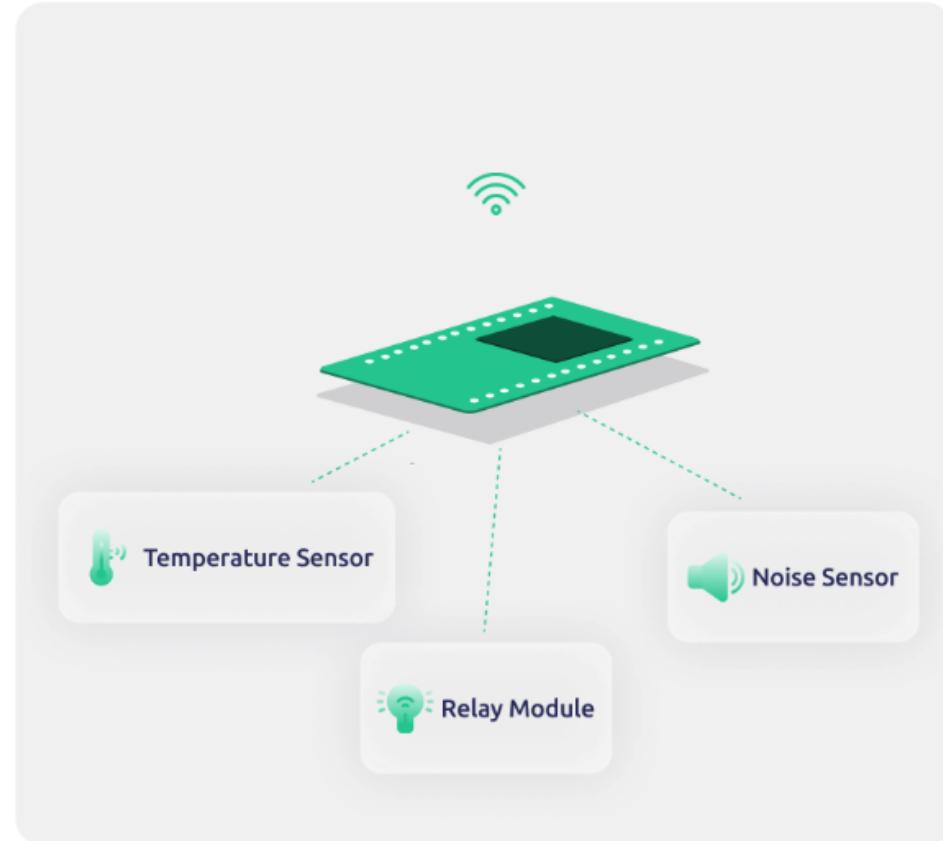
Let's learn the key concepts of Blynk Platform.

Device

A device is usually a microcontroller (MCU) like ESP32, Arduino, etc. You can attach sensors and actuators to an MCU and monitor or control them with Blynk.

Blynk can connect your device to the Internet using WiFi, cellular or Ethernet connectivity.

[More info here →](#)



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Blynk Tour

✓ Welcome — ✓ Platform — ✓ Modes — ✓ Devices — ✓ Template — 6 Template components — 7 Features

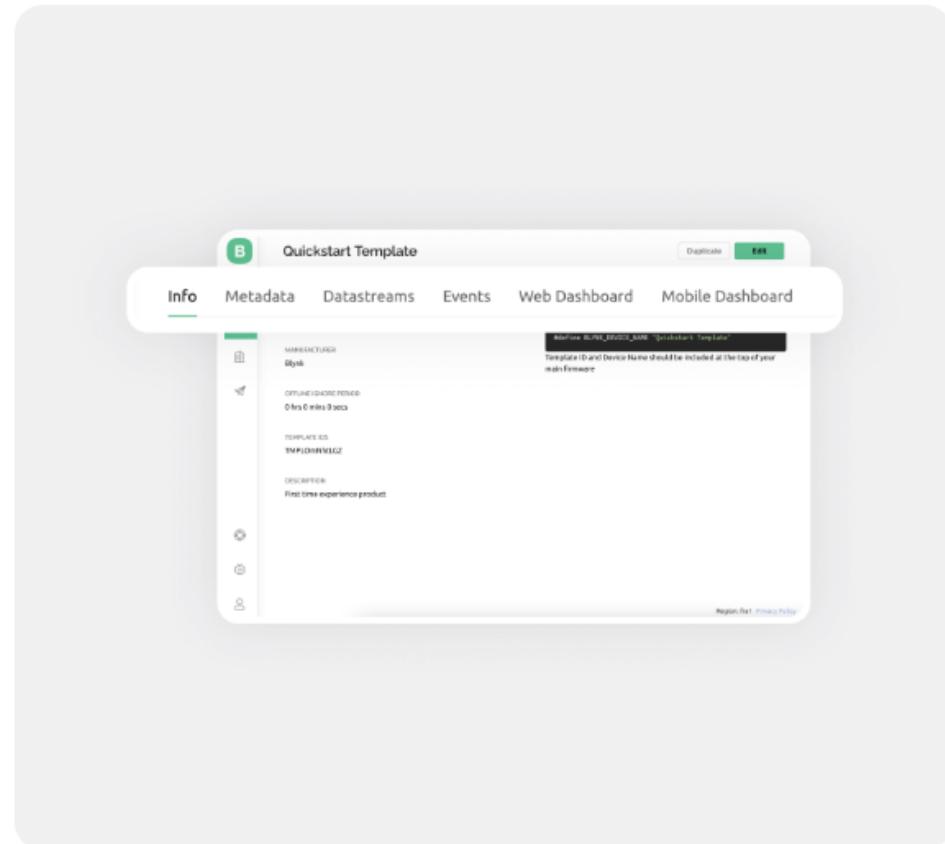
Template components

Each Template consists of:

- Datastreams - channels to transfer data from/to device
- Mobile app UI
- Web Dashboard UI
- Notifications

When you update a template, the changes will be applied to all devices created from this template. How cool is that!

[More info here →](#)



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Cancel

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Blynk Tour

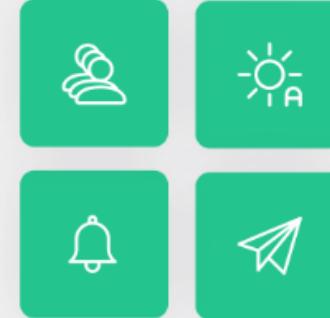
✓ Welcome — ✓ Platform — ✓ Modes — ✓ Devices — ✓ Template — ✓ Template components — 7 Features

With Blynk you can:

- Set up notifications
- Set up automations
- Share your device with other users
- Update device firmware Over-The-Air
- Provision Wi-Fi credentials to devices with no code
- Manage roles and permissions
- Manage organizations

and more...

Now if you have your device handy, let's start with getting it online now!



← Back

Cancel

Finish

Quickstart

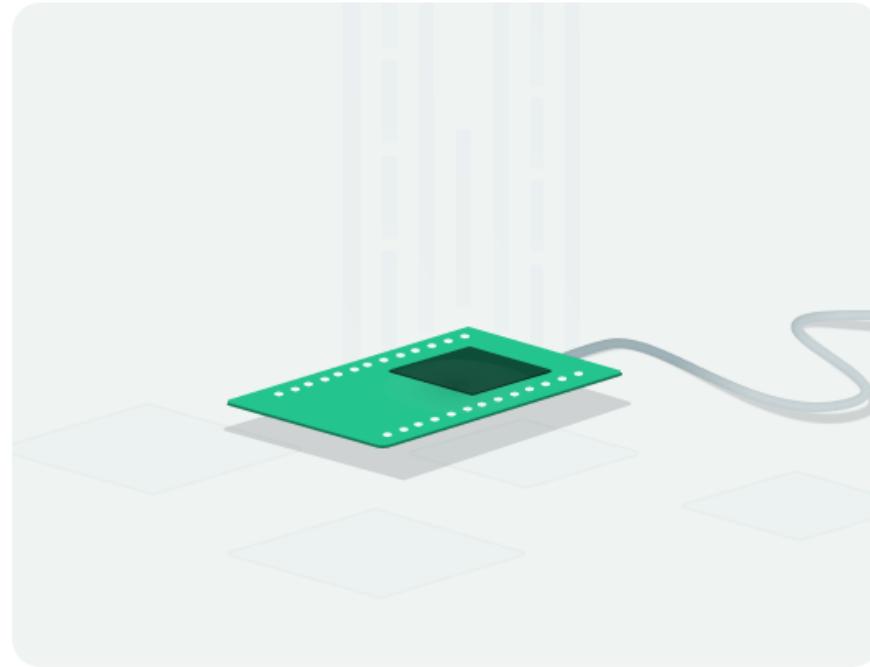
This is a step by step guide to get your first device online and start controlling it from anywhere in the world in **less than 5 minutes**

What you will need:

- Supported hardware. Check the full list of supported hardware [here](#).
- IDE. You can use Arduino IDE or PlatformIO or any other editor.
- Blynk Library
- It will be beneficial if you already know how to upload code to your hardware.

What we will do together:

- Create your first device in Blynk.Cloud
- Prepare firmware code and upload it to your device
- See your device online and control it from Blynk.Console and Blynk.Apps.



[Cancel](#) [Let's go!](#)

Quickstart

1 Hardware

2 IDE

3 Blynk Library

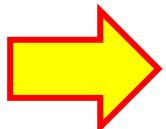
4 Code

5 Device activation

Which hardware are you using?

We will help you prepare the code for your board

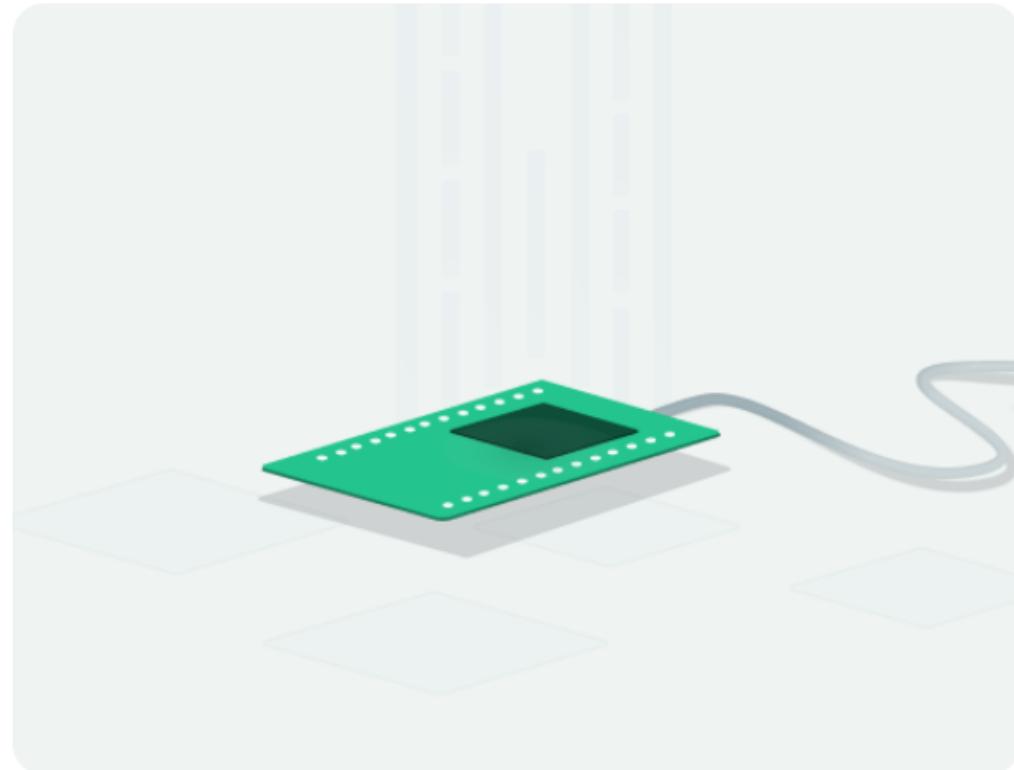
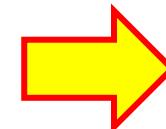
ESP32



What is your device connectivity type

Blynk supports various connection types (BLE is not supported yet).

WiFi



Cancel

Next →

Quickstart



Hardware

2

IDE

3

Blynk Library

4

Code

5

Device activation

Which IDE do you use?



Arduino

[Download →](#)

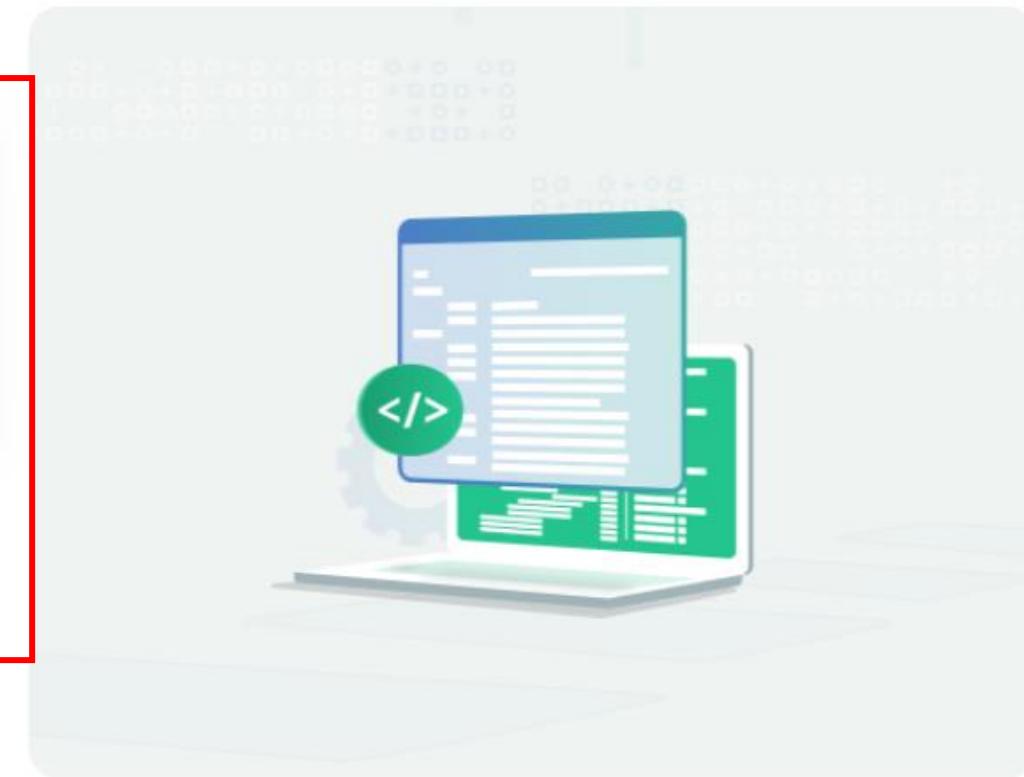


PlatformIO

[Download →](#)



Other



[← Back](#)

[Cancel](#)

[Next →](#)

Quickstart



Hardware

2 IDE

3

Blynk Library

4

Code

5

Device activation

Which IDE do you use?



Arduino
[Download →](#)



PlatformIO
[Download →](#)



Other



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Quickstart



Hardware



IDE

3

Blynk Library

4

Code

5

Device activation

Install Blynk Library for your IDE and other languages

Blynk supports C++, Python, JS, Lua, and more...

Unfortunately, we won't be able to provide you with a ready-to-use code at the moment, but you can check these resources to find an example that would work for you:

- [Blynk Docs](#)
- [Blynk Community](#)
- [C++ Library](#)
- [Lua Library](#)
- [Python Library](#)
- [JS Library](#)

[← Back](#)[Cancel](#)[Next →](#)

[Introduction](#)[GETTING STARTED](#)[Supported Hardware](#)[Quickstart >](#)[Device Activation Methods >](#)[Template Quick Setup >](#)[Send Data From Hardware To Blynk](#)[Control Devices \(GPIOs and beyond\)](#)[Events](#)[Notifications \(Alerts\)](#)[Sign Up / Sign In](#)[GENERAL CONCEPTS](#)[Developer Mode](#)[Device](#)[Device Template](#)[Users >](#)[Organizations](#)

Introduction

:

Welcome to Blynk Documentation

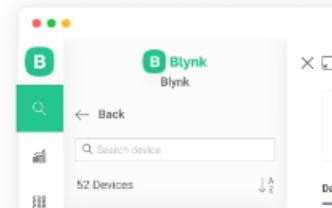
 This documentation covers the **latest generation** of the Blynk IoT Platform.

Blynk is a comprehensive software suite that enables the prototyping, deployment, and remote management of connected electronic devices at any scale.

Whether it's personal IoT projects or commercial connected products in the millions, Blynk empowers users to connect their hardware to the cloud and create iOS, Android, and web applications, analyze real-time and historical data from devices, remotely control them from anywhere, receive important notifications, and much more.

Components of the Blynk IoT Platform

Blynk.Console



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[Reject all](#)



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Log In



Topics

More

Categories

Announcements

Meta

Projects made with Blynk

Need Help With My Project

FAQ

All categories

Tags

esp8266

arduino

esp32

android

See more categories

Hello, Blynkers!



Please follow these recommendations when creating a new topic. 🙏

1. Check the forum if there are similar or identical topics 😊. If so, describe your problem in the comments of that topic.
2. Check Blynk docs <https://docs.blynk.io>. You may find answers to your questions there. 😊
3. Carefully select a category and attach tags.

all categories ▶

all tags ▶

Latest

Categories

Top

Topic

Replies Views Activity

📅 Upcoming Plan Updates!

Announcements plans

Hey Blynkers, Heads up that we will be updating our pricing plans to better serve their purpose, launching on October 16, 2023. Rest assured, the transition will be smooth, and your current projects will remain unaffected...
[read more](#)



33

8.3k

2d

“plus” plan - user access to template and device

Blynk 2.0 esp32



28

691

22m



blynkkk / blynk-library



Type *I* to search



< Code Issues (2) Pull requests (5) Actions Projects Wiki Security Insights

Releases / v1.3.2

v1.3.2

Latest

Compare ▾



vshymanskyy released this Sep 4

· 5 commits to master since this release

↳ v1.3.2

→ 3811c19

/_)/_ /_ _ / /
/_ / / / / / \ ' /
/_ / / \ , / / / / \ \
/_ / v1.3.2



With love from Ukraine 💙💛

How to install Blynk library: [⇒ link ⇐](#)

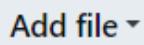
In this release

- Arduino UNO R4 Over the Air upgrade via [Blynk.NCP](#)
- Various bug fixes and improvements

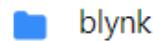
Remember to regularly update your **IDE**, **Libraries**, and **Boards**!

Check out the full list of [supported hardware](#)

4 files · 1.6 kB · Blb · Last commit · GitHub · 1.4

 master ▾ 1 branch 4 tags Go to file Add file ▾ Code ▾

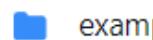
vshymanskyy Update README.md

29d9468 on Feb 22  56 commits

blynk

Use net.socket "sent" event

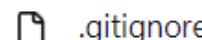
5 years ago



examples

Update to Blynk.Cloud

2 years ago



.gitignore

Initial commit

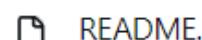
5 years ago



LICENSE

Initial commit

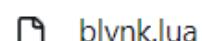
5 years ago



README.md

Update README.md

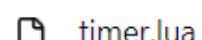
8 months ago



blynk.lua

Add internal pin callback

2 years ago



timer.lua

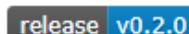
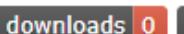
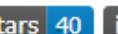
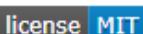
Initial commit

5 years ago

 README.md

Lua client for Blynk IoT

Note: The library has been updated for Blynk 2.0

 release v0.2.0 downloads 0 stars 40 issues 3 open license MIT

About

Blynk library for Lua. Works with Lua 5.1+,
LuaJIT, NodeMCU.

 [blynk.io/](#)

- iot
- esp8266
- lua-library
- lua
- openwrt
- esp32
- luajit
- blynk

 [Readme](#) [MIT license](#) [Activity](#) [40 stars](#) [6 watching](#) [13 forks](#) [Report repository](#)

Releases 4

 [v0.2.0 Latest](#)

on May 9, 2022

[+ 3 releases](#)



master

1 branch

2 tags

Go to file

Add file

Code

About

Blynk library for Python. Works with Python 2, Python 3, MicroPython.

[blynk.io/](#)

raspberry-pi iot internet-of-things
smartphone-interaction smartphone
blynk

[Readme](#)

[MIT license](#)

[Activity](#)

[257 stars](#)

[31 watching](#)

[93 forks](#)

[Report repository](#)

README.md

Python client for Blynk IoT

Note: The library has been updated for Blynk 2.0.



blynk-library-js

Public

Watch 24

Fork 66

Star 209

master

1 branch

3 tags

Go to file

Add file

Code



vshymanskyy Update dist

d886383 on Feb 15, 2019 183 commits

bin	Restructure tools	7 years ago
certs	new cert	7 years ago
dist	Update dist	5 years ago
examples	Switch port to 443	5 years ago
.gitignore	Initial commit	8 years ago
.npmignore	Add .npmignore	7 years ago
LICENSE	Initial commit	8 years ago
Makefile	Boost ver	7 years ago
README.md	Update README.md	5 years ago
blynk-browser.js	path option	6 years ago
blynk-espruino.js	Fix connection, boost ver	5 years ago
blynk-node.js	Switch port to 443	5 years ago
blynk.js	Fix connection, boost ver	5 years ago

About

Blynk library for JS. Works with Browsers, Node.js, Espruino.

[blynk.io/](#)

iot npm-package iot-platform
smartphone-interaction smartphone
espruino blynk

[Readme](#)[MIT license](#)[Activity](#)[209 stars](#)[24 watching](#)[66 forks](#)[Report repository](#)

Releases 3

v0.5.4 Latest
on Feb 15, 2019

[+ 2 releases](#)

Quickstart

✓ Hardware

✓ IDE

✓ Blynk Library

4 Code

5 Device activation

Here is a code for your device

1. Enter your Wi-Fi network SSID (name) and password to connect your device.

* We never store or send this information anywhere. It's only used to generate the firmware code . You can leave these fields empty and manually add WiFi credentials in your sketch.

Wi-Fi Network Name (SSID)

Password



2. Copy code from the right panel (or download it as a file).

3. Create a new sketch in your IDE and paste the code.

4. In IDE check that you are using correct board and

```
*****
```

Copy

Download

This is a simple demo of sending and receiving some data.

Be sure to check out other examples!

```
*****
```

```
/* Fill-in information from Blynk Device Info here */
```

```
#define BLYNK_TEMPLATE_ID          "TMPL6zTPy_0rx"  
#define BLYNK_TEMPLATE_NAME        "Quickstart Template"  
#define BLYNK_AUTH_TOKEN           "6f9ZS-n2TBew8XhhI3FgyFtZTUc0ka0y"
```

```
/* Comment this out to disable prints and save space */
```

```
#define BLYNK_PRINT Serial
```

```
#include <WiFi.h>
```

```
#include <WiFiClient.h>
```

```
#include <BlynkSimpleEsp32.h>
```

← Back

Cancel

Next →

Quickstart



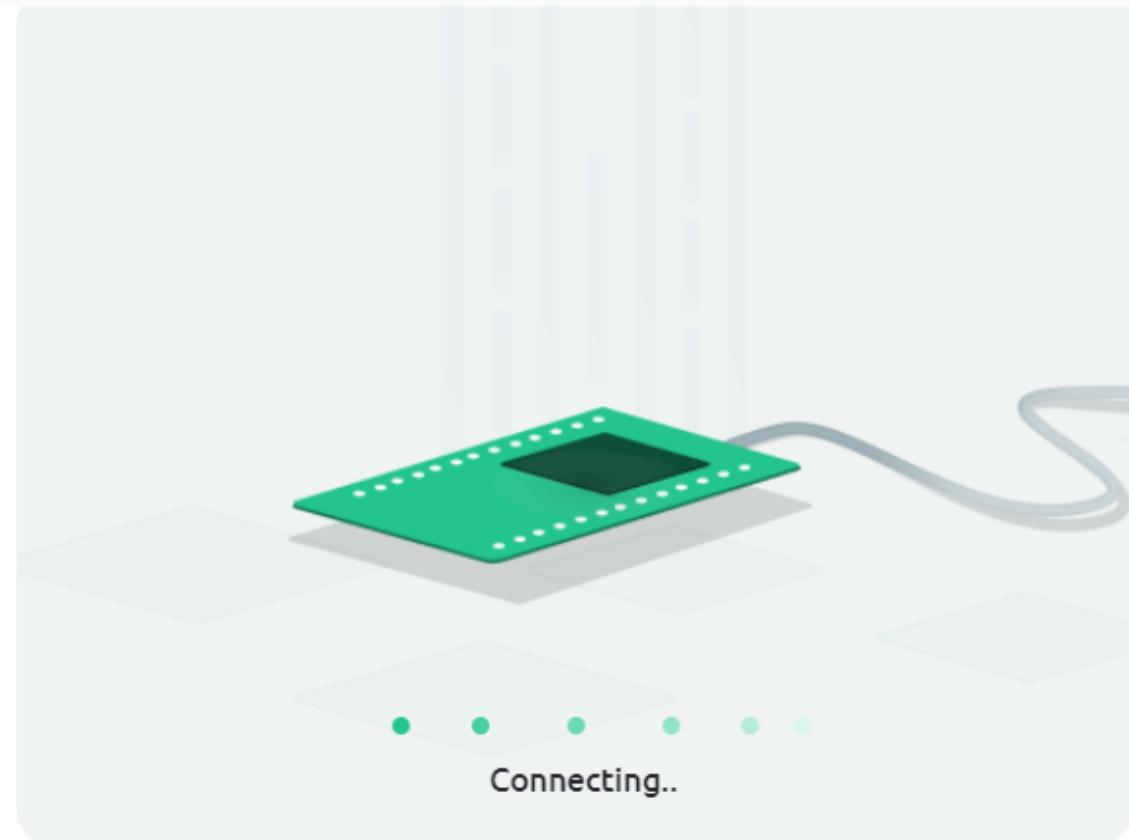
Waiting for device online...

Check the Serial Monitor output. It should show something similar to this:

```
[24] Connecting to WiFiHotspot
[2638] Connected to WiFi
[2638] IP: 10.0.0.10
[2638]

_____
/ _ )/ /_ ____ / /_
/ _ / / / / _ \ \ ' /_
/___/_/\_, /_//_/_/\ \
/___/ v1.0.1

[2644] Connecting to blynk.clo
[2829] Ready (ping: 29ms).
```



If your device doesn't show up online after you completed all the steps in this guide, check this [Troubleshooting guide](#)

[↑ Back](#)

Cancel

Go To Device

B

My organization - 7465AH



DEVICES



My Devices

[+ New Device](#)

My Devices

1

1 Device ...

LOCATIONS



Quickstart Device

6f9ZS-n2TBew8XhhI3FgyFtZTUC... koson.trachu@gmail.com (you)

Offline



My locations

0



USERS



My organization members 1

All 1

With no devices 0



My Devices

1 Device ...

Name



Auth Token



Device Owner



Status

Actions



Example

B

My organization - 7465AH



MY TEMPLATES



My Templates



BLUEPRINTS

BETA

All Blueprints



Start by creating your
first template

Template is a digital model of a physical object. It
is used in Blynk platform as a template to be
assigned to devices.

+ New Template

Region: sgp1 [Privacy Policy](#)



B

My organization - 7465AH



MY TEMPLATES



My Templates

BLUEPRINTS

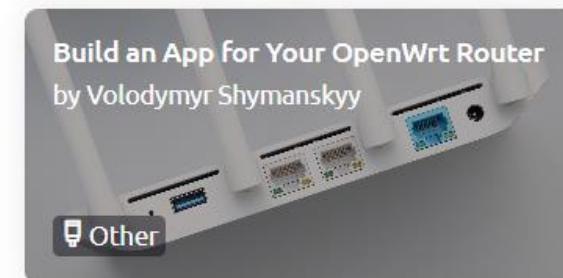
BETA

All Blueprints

All Blueprints

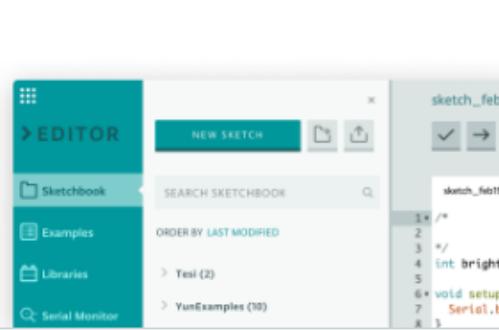
Blueprint is a pre-built Template that includes a tutorial, a firmware code example, dashboard UI, and everything else you need for a working device.

8 Blueprints



Arduino Web Editor

Start coding online and save your sketches in the cloud. The most up-to-date version of the IDE includes all libraries and also supports new Arduino boards.

[CODE ONLINE](#)[GETTING STARTED](#)

Downloads



Arduino IDE 2.2.1

The new major release of the Arduino IDE is faster and even more powerful! In addition to a more modern editor and a more responsive interface it features autocompletion, code navigation, and even a live debugger.

For more details, please refer to the [Arduino IDE 2.0 documentation](#).

Nightly builds with the latest bugfixes are available through the section below.

DOWNLOAD OPTIONS

Windows Win 10 and newer, 64 bits

Windows MSI installer

Windows ZIP file

Linux AppImage 64 bits (X86-64)

Linux ZIP file 64 bits (X86-64)

macOS Intel, 10.14: "Mojave" or newer, 64 bits

macOS Apple Silicon, 11: "Big Sur" or newer, 64 bits

[Release Notes](#)

1. Install Arduino IDE

<https://www.arduino.cc/en/software/>

Arduino IDE Setup

License Agreement
Please review the license terms before installing Arduino IDE.

Press Page Down to see the rest of the agreement.

Terms of Service

The Arduino software is provided to you "as is" and we make no express or implied warranties whatsoever with respect to its functionality, operability, or use, including, without limitation, any implied warranties of merchantability, fitness for a particular purpose, or infringement. We expressly disclaim any liability whatsoever for any direct, indirect, consequential, incidental or special damages, including, without limitation, lost revenues, lost profits, losses resulting from business interruption or loss of data, regardless of the form of action or legal theory under which the liability may be asserted, even if advised of the possibility or likelihood of such damages.

If you accept the terms of the agreement, click I Agree to continue. You must accept the agreement to install Arduino IDE.

Arduino IDE 2.2.1

Arduino IDE Setup

Choose Installation Options
Who should this application be installed for?

Please select whether you wish to make this software available to all users or just yourself

Anyone who uses this computer (all users)
 Only for me (koson)

There is already a per-machine installation.(C:\Arduino_IDE)
Will reinstall/upgrade.

Arduino IDE 2.2.1

< Back

Arduino IDE Setup

Installing
Please wait while Arduino IDE is being installed.

Arduino IDE 2.2.1

< Back

Arduino IDE Setup

License Agreement
Please review the license terms before installing Arduino IDE.

Press Page Down to see the rest of the agreement.

Terms of Service

The Arduino software is provided to you "as is" and we make no express or implied warranties whatsoever with respect to its functionality, operability, or use, including, without limitation, any implied warranties of merchantability, fitness for a particular purpose, or infringement. We expressly disclaim any liability whatsoever for any direct, indirect, consequential, incidental or special damages, including, without limitation, lost revenues, lost profits, losses resulting from business interruption or loss of data, regardless of the form of action or legal theory under which the liability may be asserted, even if advised of the possibility or likelihood of such damages.

If you accept the terms of the agreement, click I Agree to continue. You must accept the agreement to install Arduino IDE.

Arduino IDE 2.2.1

Completing Arduino IDE Setup

Arduino IDE has been installed on your computer.
Click Finish to close Setup.

Run Arduino IDE

< Back



Select Board



sketch_oct9a.ino



```
1 void setup() {  
2     // put your setup code here, to run once:  
3  
4 }  
5  
6 void loop() {  
7     // put your main code here, to run repeatedly:  
8  
9 }  
10
```

OK



Install Blynk library

<https://docs.blynk.io/en/blynk-library-firmware-api/installation>

Installation

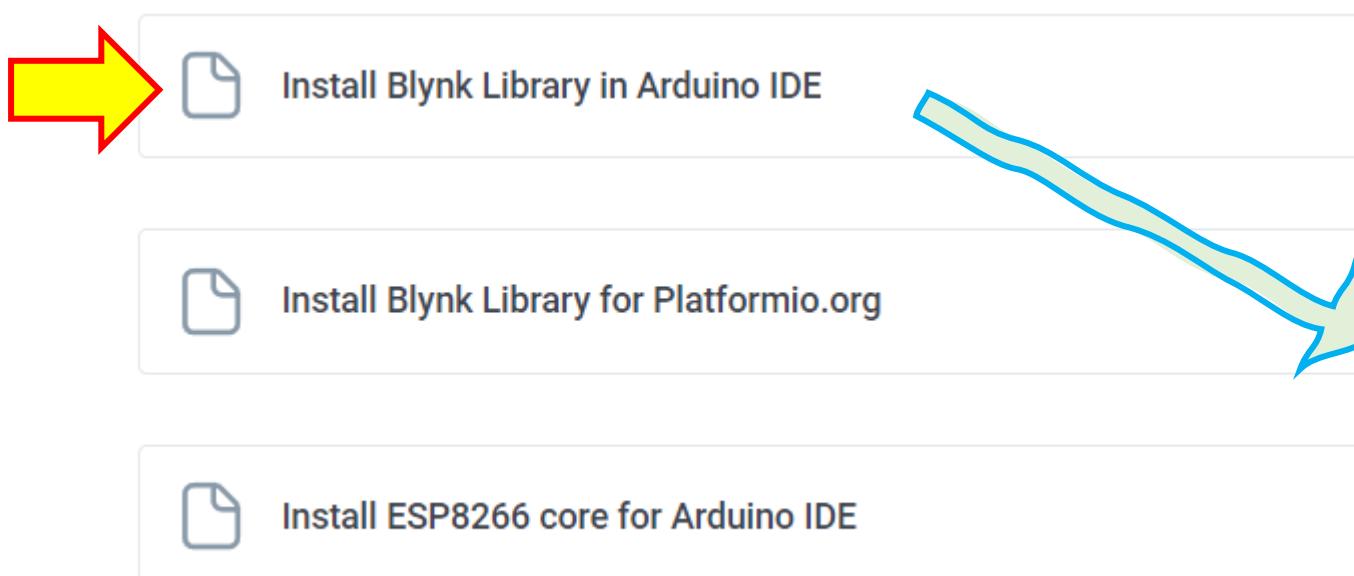
⋮

How to install Blynk library on popular IDEs

An easy to use and portable C++ library, pre-configured to work with **hundreds of development boards**.

The library implements a streaming connection protocol (i.e. the device stays always connected to the cloud), that allows for a **low latency, bi-directional** communication.

Use [Quickstart flow](#) for a quick demo and make sure to explore [Blynk Library documentation](#) afterwards.



Install Blynk Library in Arduino IDE

Step by step guide on how to install Blynk Library

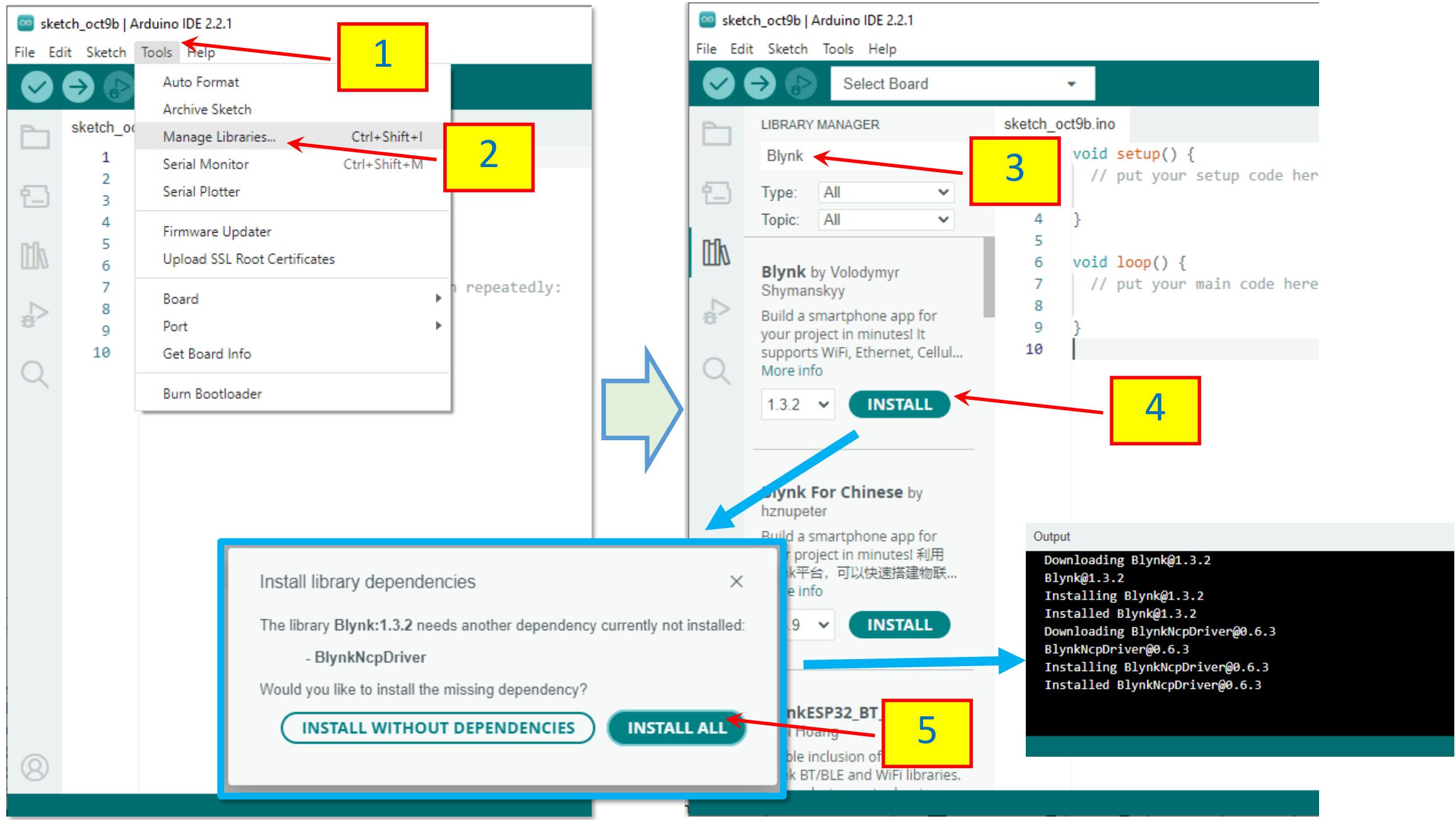
There are three ways to install Blynk Library for Arduino IDE:

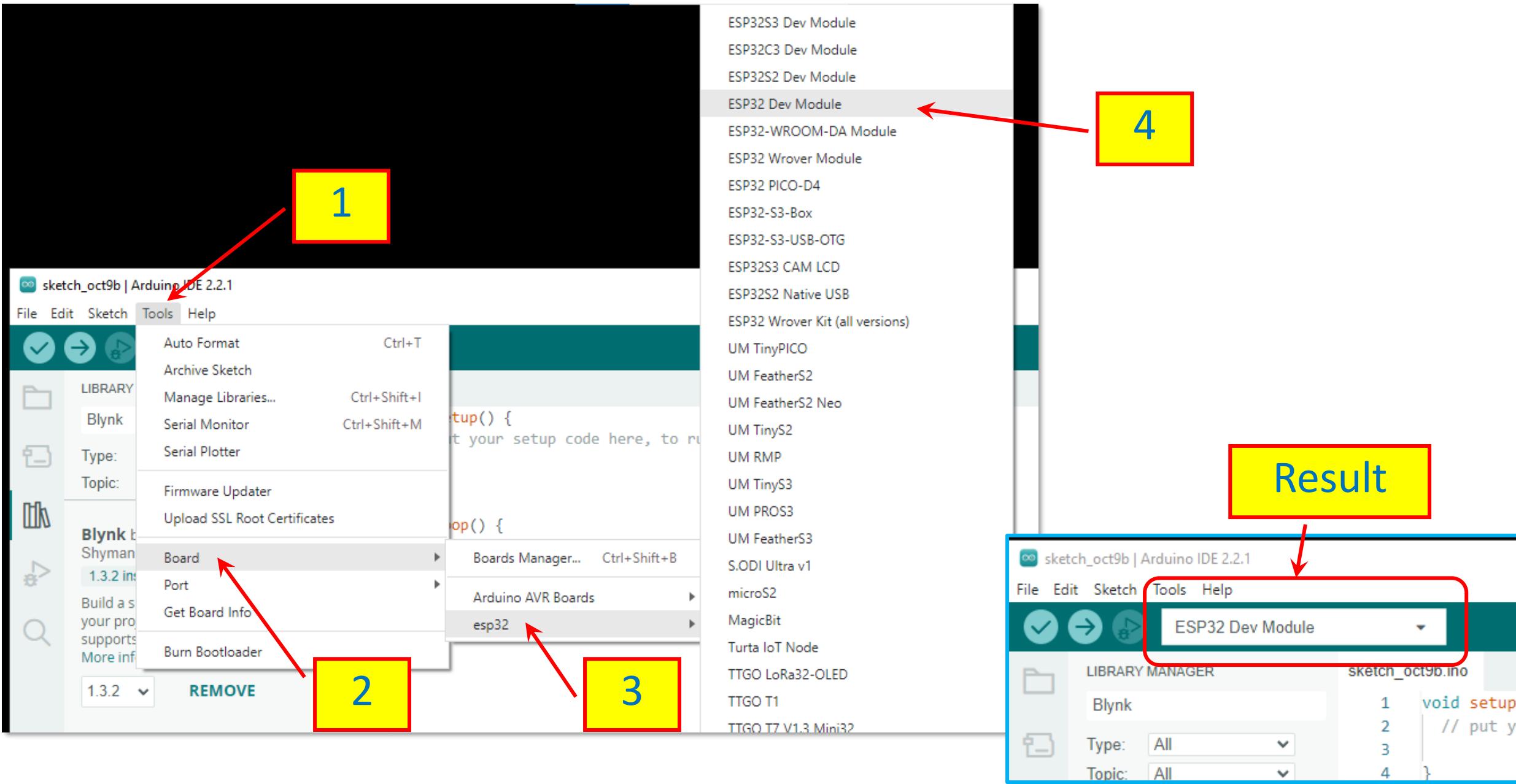
1. Using built-in library manager in Arduino IDE
2. Installing Blynk library as ZIP file in Arduino IDE
3. Manually install Blynk Library

1. Install Blynk Library using built-in library manager in Arduino IDE

To install a new library into your Arduino IDE you can use the Library Manager (available from IDE version 1.6.2). Open the IDE and click to the "Sketch" menu and then Include Library > Manage Libraries.

A screenshot of the Arduino IDE interface showing the Sketch menu open. The 'Manage Libraries...' option under the 'Include Library' submenu is highlighted with a red box.





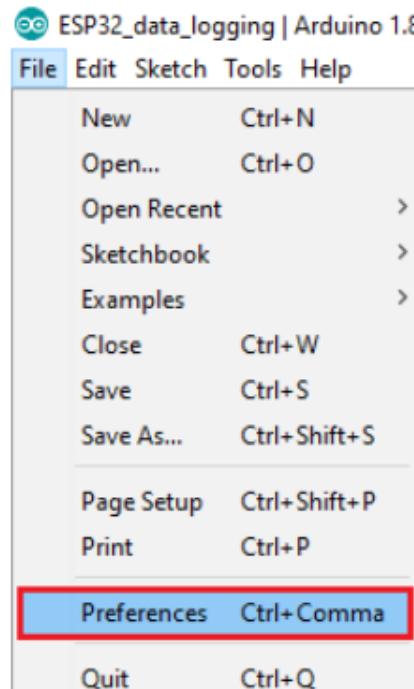
Installing the ESP32 Board in Arduino IDE

<https://randomnerdtutorials.com/installing-the-esp32-board-in-arduino-ide-windows-instructions/>

Installing ESP32 Add-on in Arduino IDE

To install the ESP32 board in your Arduino IDE, follow these next instructions:

1. In your Arduino IDE, go to **File > Preferences**

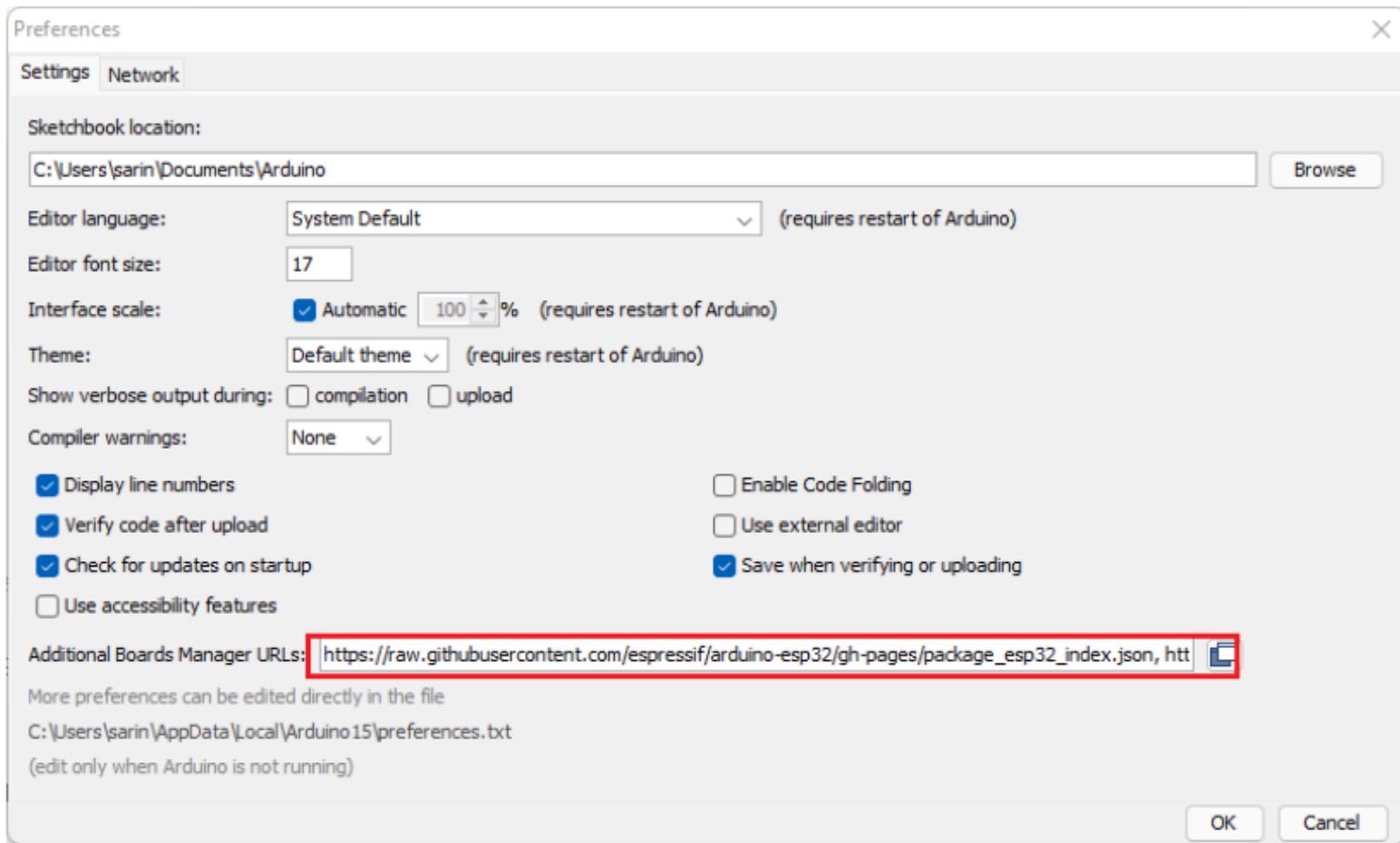


2. Enter the following into the “Additional Board Manager URLs” field:

```
https://raw.githubusercontent.com/espressif/arduino-esp32/gh-pages/package_esp32_index.json
```

Next

Then, click the “OK” button:

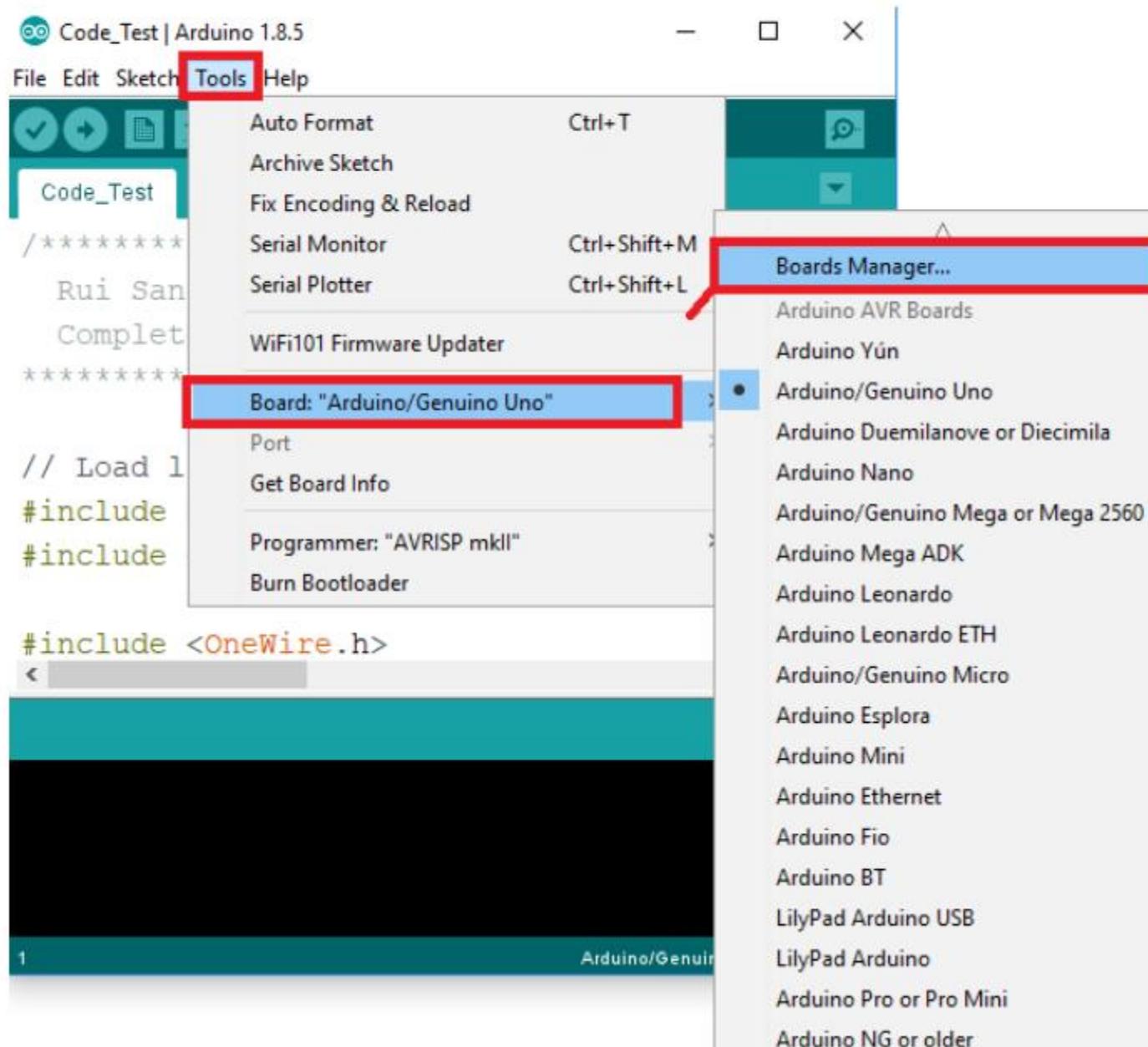


Note: if you already have the ESP8266 boards URL, you can separate the URLs with a comma as follows:

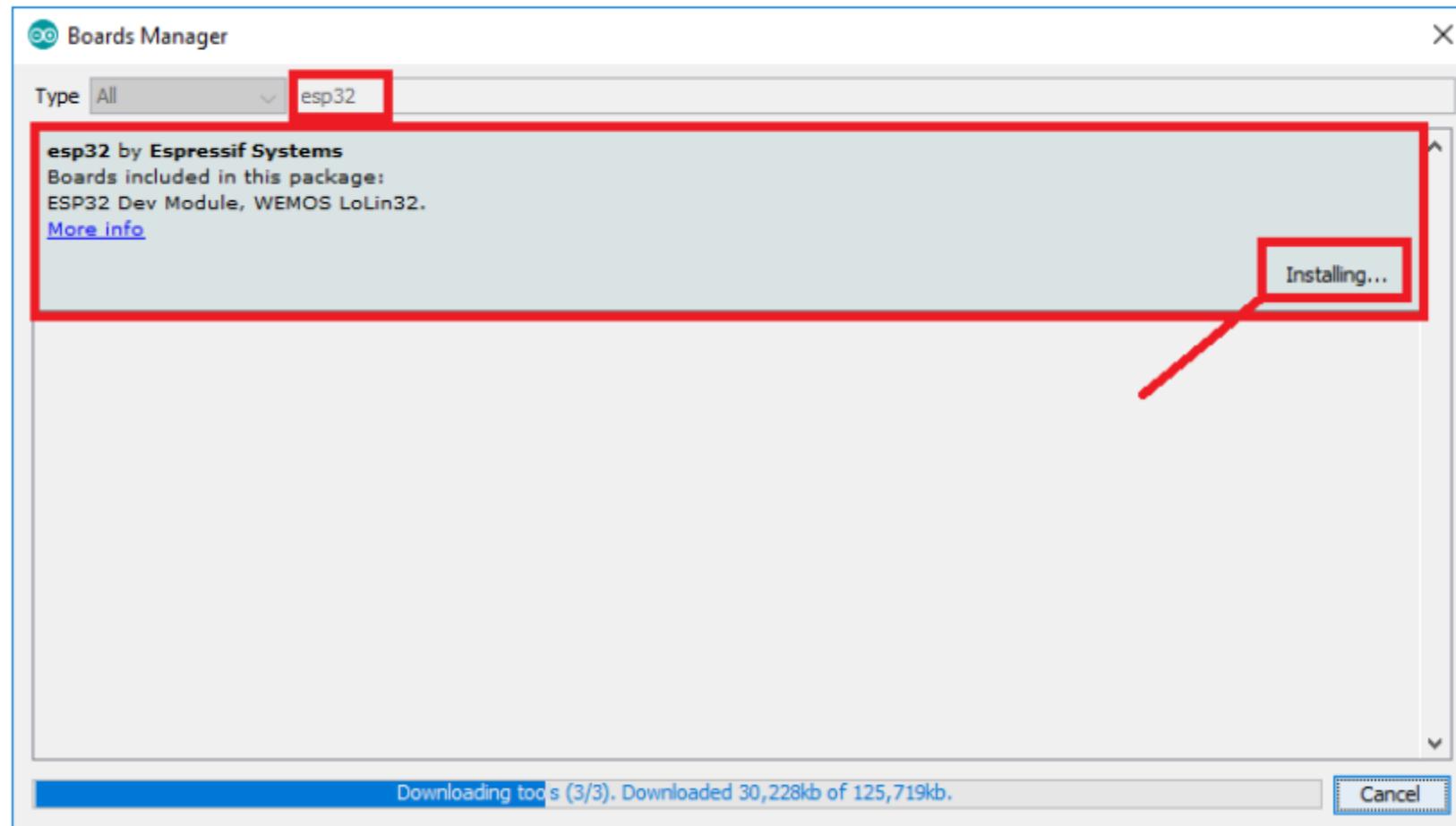
```
https://raw.githubusercontent.com/espressif/arduino-esp32/gh-
pages/package_esp32_index.json,
http://arduino.esp8266.com/stable/package_esp8266com_index.json
```

Next

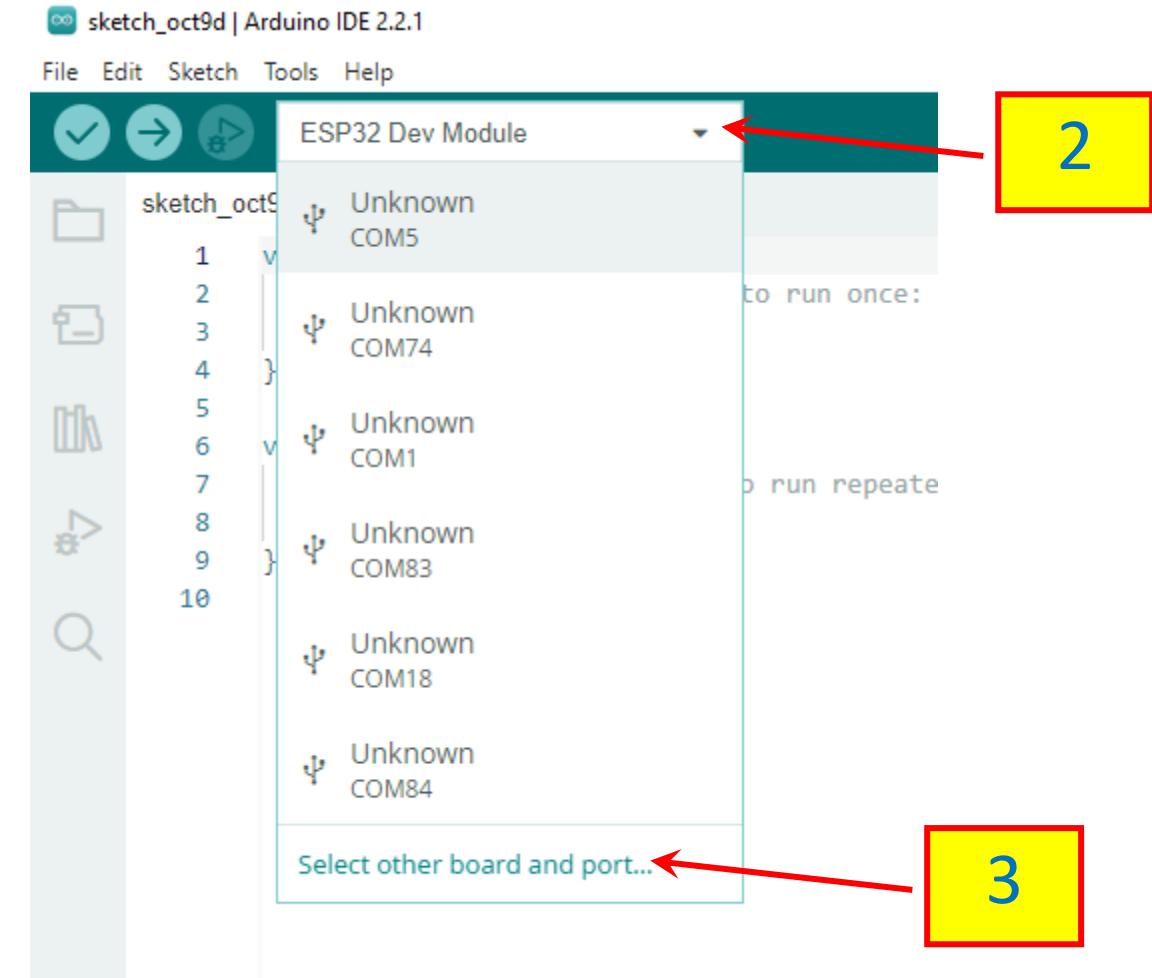
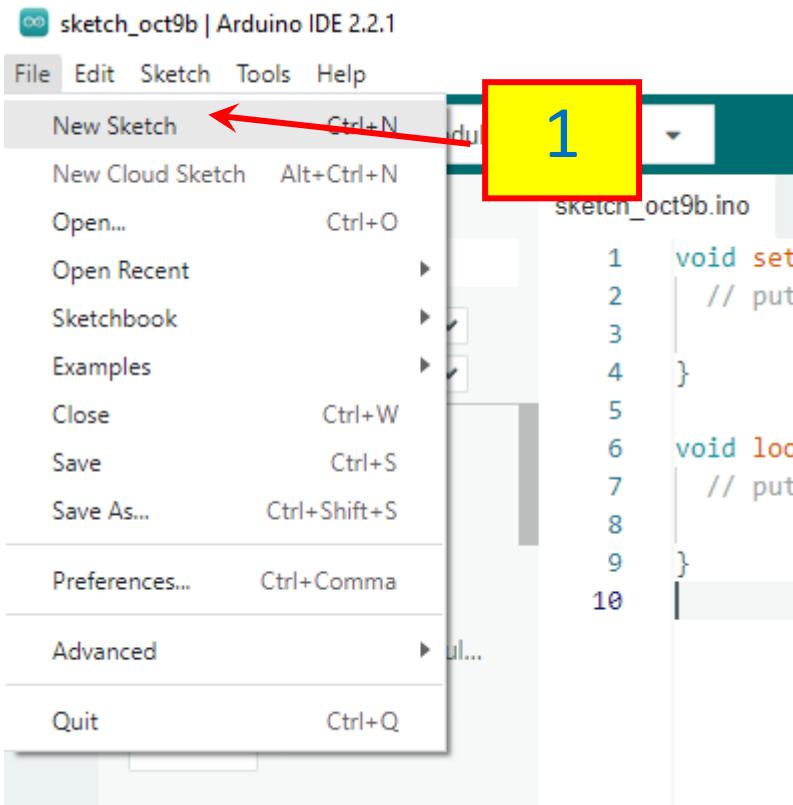
3. Open the Boards Manager. Go to **Tools > Board > Boards Manager...**

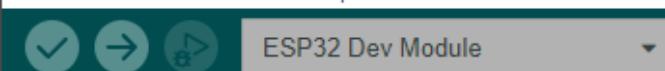


4. Search for **ESP32** and press install button for the “**ESP32 by Espressif Systems**“:



Create Arduino sketch

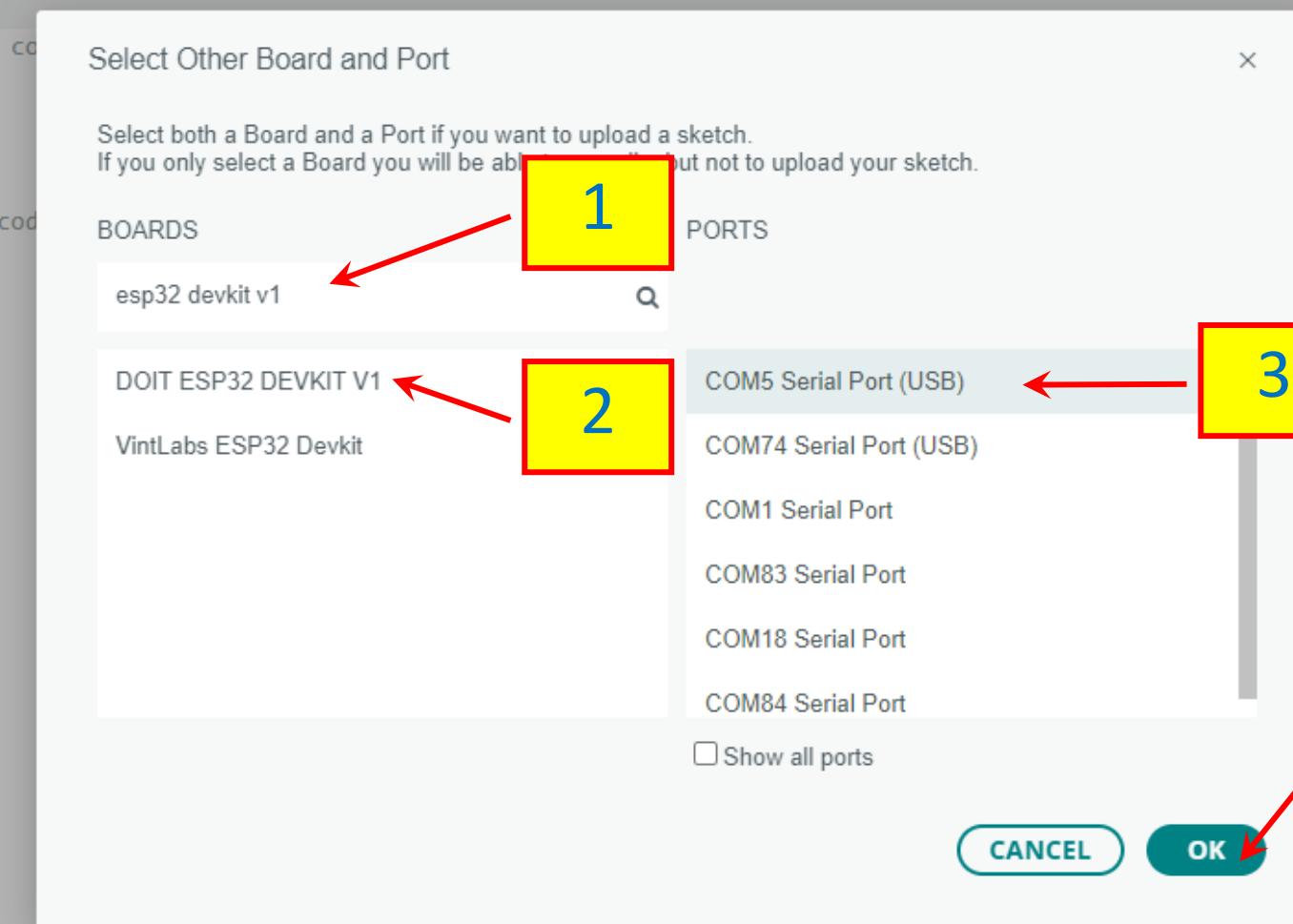




ESP32 Dev Module

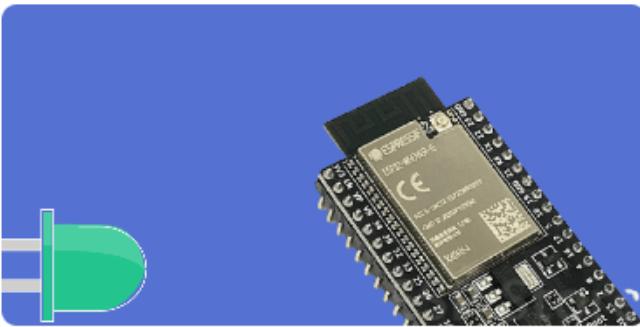
sketch_oct9d.ino

```
1 void setup() {  
2     // put your setup code here  
3 }  
  
4 void loop() {  
5     // put your main code here  
6 }  
7  
8 }
```



<https://blynk.cloud/dashboard/.....>

About

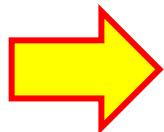


This project is a quick start tutorial on connecting the ESP32 board to Blynk and controlling a built-in LED.

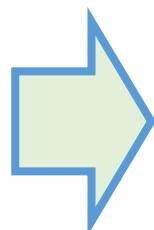
 Blynk
 ESP32
 WiFi

CATEGORY
Smart Home and Home Automation, Other

TAGS



Use Blueprint



Blink an LED with ESP32 (with WiFi provisioning & OTA)



 Read the tutorial

Activate device
Create new device and get online in two simple steps

Example code
Click to view and prepare the code

```
// *** MAIN SETTINGS ***
// Replace this block with correct
template settings.
// You can find it for every template
here:
//
```

Blink an LED with ESP32 (with WiFi provisioning & OTA) code



[Download Project](#)

Select



Arduino IDE

Platformio

```
// *** MAIN SETTINGS ***
// Replace this block with correct template settings.
// You can find it for every template here:
//
//   https://blynk.cloud/dashboard/templates

#define BLYNK_TEMPLATE_ID          "TMPxxxxxx"
#define BLYNK_TEMPLATE_NAME         "Device"

#define BLYNK_FIRMWARE_VERSION     "0.1.0"

#define BLYNK_PRINT Serial
//#define BLYNK_DEBUG

#define APP_DEBUG

#include "BlynkEdgent.h"
```

Copy code
or
Download project



sketch_oct9d.ino

```
1 // *** MAIN SETTINGS ***
2 // Replace this block with correct template settings.
3 // You can find it for every template here:
4 //
5 // https://blynk.cloud/dashboard/templates
6
7 #define BLYNK_TEMPLATE_ID          "TMPxxxxxx"
8 #define BLYNK_TEMPLATE_NAME        "Device"
9
10 #define BLYNK_FIRMWARE_VERSION    "0.1.0"
11
12 #define BLYNK_PRINT Serial
13 //#define BLYNK_DEBUG
14
15 #define APP_DEBUG
16
17 #include "BlynkEdgent.h"
18
19 #define LED_PIN 2 // Use pin 2 for LED (change it, if your board uses another pin)
20
21
22
23 // V0 is a datastream used to transfer and store LED switch state.
24 // Every time you use the LED switch in the app, this function
25 // will listen and update the state on device
26 BLYNK_WRITE(V0)
27 {
28     // Local variable `value` stores the incoming LED switch state (1 or 0)
29     // Based on this value, the physical LED on the board will be on or off:
30     int value = param.asInt();
```

<https://blynk.cloud/dashboard/.....>

The screenshot shows the Blynk Cloud dashboard. At the top, there's a blue banner with the text "Blink an LED with ESP32 (with WiFi provisioning & OTA)" and an image of an ESP32 module. Below this, a green button labeled "Activate device" with a plus sign is highlighted by a red arrow pointing from the left. To the right of the button is a yellow box with the number "1". Below the button, the text "Create new device and get online in two simple steps" is visible. Further down, there's a section titled "Example code" with a "Copy" button, containing placeholder code:

```
// *** MAIN SETTINGS ***
// Replace this block with correct
template settings.
// You can find it for every template
here:
//
```

The screenshot shows the "New Device Activation" wizard. Step 1, "Firmware upload", is selected and highlighted with a green circle. The text "Upload provided firmware to your device" is displayed, with "Arduino IDE" currently selected. Below this, the first two steps of the process are listed:

- 1 Download the .zip file and import the project into your IDE
- 2 In **Edgent_Blynk_ESP32_LED.ino** replace the default settings with these configuration values:

```
#define BLYNK_TEMPLATE_ID "TMPL6_Pbw6fWg"
#define BLYNK_TEMPLATE_NAME "LED ESP32"
```

A "Copy" button is located next to the configuration code. Step 3, "Upload the provided code example to your device", is also shown. A yellow box with the number "2" is placed over the configuration code area.

At the bottom right, there are "Close" and "Firmware Uploaded ✓" buttons.



sketch_oct9d.ino

```
1 // *** MAIN SETTINGS ***
2 // Replace this block with correct template settings.
3 // You can find it for every template here:
4 //
5 //
6 // https://blynk.cloud/dashboard/templates
7
8 #define BLYNK_TEMPLATE_ID "TMPL6_Pbw6fWg"
9 #define BLYNK_TEMPLATE_NAME "LED ESP32"
10
11 #define BLYNK_FIRMWARE_VERSION      "0.1.0"
12
13 #define BLYNK_PRINT Serial
14 //#define BLYNK_DEBUG
15
16 #define APP_DEBUG
17
18 #include "BlynkEdgent.h"
19
20 #define LED_PIN 2 // Use pin 2 for LED (change it, if your board uses another pin)
21
22
23 // V0 is a datastream used to transfer and store LED switch state.
24 // Every time you use the LED switch in the app, this function
25 // will listen and update the state on device
26 BLYNK_WRITE(V0)
27 {
28     // Local variable `value` stores the incoming LED switch state (1 or 0)
29     // Based on this value, the physical LED on the board will be on or off:
30     int value = param.asInt();
```



File Edit Sketch Tools Help



SKETCHBOOK



ADC_mcp4728



ArduinoISP



blink



GatewayESP32MQTTClient



> generated_examples



Hello_World

mcp4728

mcp4728_triangle

> My Examples

server_ru

servo

> servo_1

servo_teel

sketch_feb26a

sketch_may22a

sketch_may22b

NEW SKETCH

ESP32 Dev Module

sketch_oct9d.ino

```
1 // *** MAIN SETTINGS
2 // Replace this block with your own settings
3 // You can find it or even download it at:
4 // https://blynk.cloud/dashboard/templates
5 //
6 //
```

ERROR!!!

Output

```
| | | | 1 file(s) copied.
cmd /c IF EXIST "C:\\Users\\koson\\AppData\\Local\\Temp\\.arduinoIDE-unsaved202399-29372-um1089.ajjv\\sketch_oct9d\\bootloader.
esptool.py v4.2.1
Creating esp32 image...
Merged 1 ELF section
Successfully created esp32 image.
cmd /c if exist "C:\\Users\\koson\\AppData\\Local\\Temp\\.arduinoIDE-unsaved202399-29372-um1089.ajjv\\sketch_oct9d\\bootloader.
esptool.py v4.2.1
cmd /c if not exist "C:\\Users\\koson\\AppData\\Local\\Temp\\arduino\\sketches\\sketch_oct9d\\bootloader\\esptool.py" (
    cd "C:\\Users\\koson\\AppData\\Local\\Temp\\arduino\\sketches\\sketch_oct9d\\bootloader" &
    curl -L -o esptool.py https://github.com/espressif/esptool.py/releases/download/v4.2.1/esptool.py
)
Detecting libraries used...
C:\\Users\\koson\\AppData\\Local\\Arduino15\\packages\\esp32\\tools\\xtensa-esp32-elf-gcc\\5.2.0-7-20180710\\bin\\xtensa-esp32-elf-gcc
Alternatives for BlynkEdgent.h: []
ResolveLibrary(BlynkEdgent.h)
| -> candidates: []
C:\\Users\\koson\\AppData\\Local\\Temp\\.arduinoIDE-unsaved202399-29372-um1089.ajjv\\sketch_oct9d\\src\\main.cpp
#include "BlynkEdgent.h"
| | | |
compilation terminated.

exit status 1
```

Compilation error: BlynkEdgent.h: No such file or directory



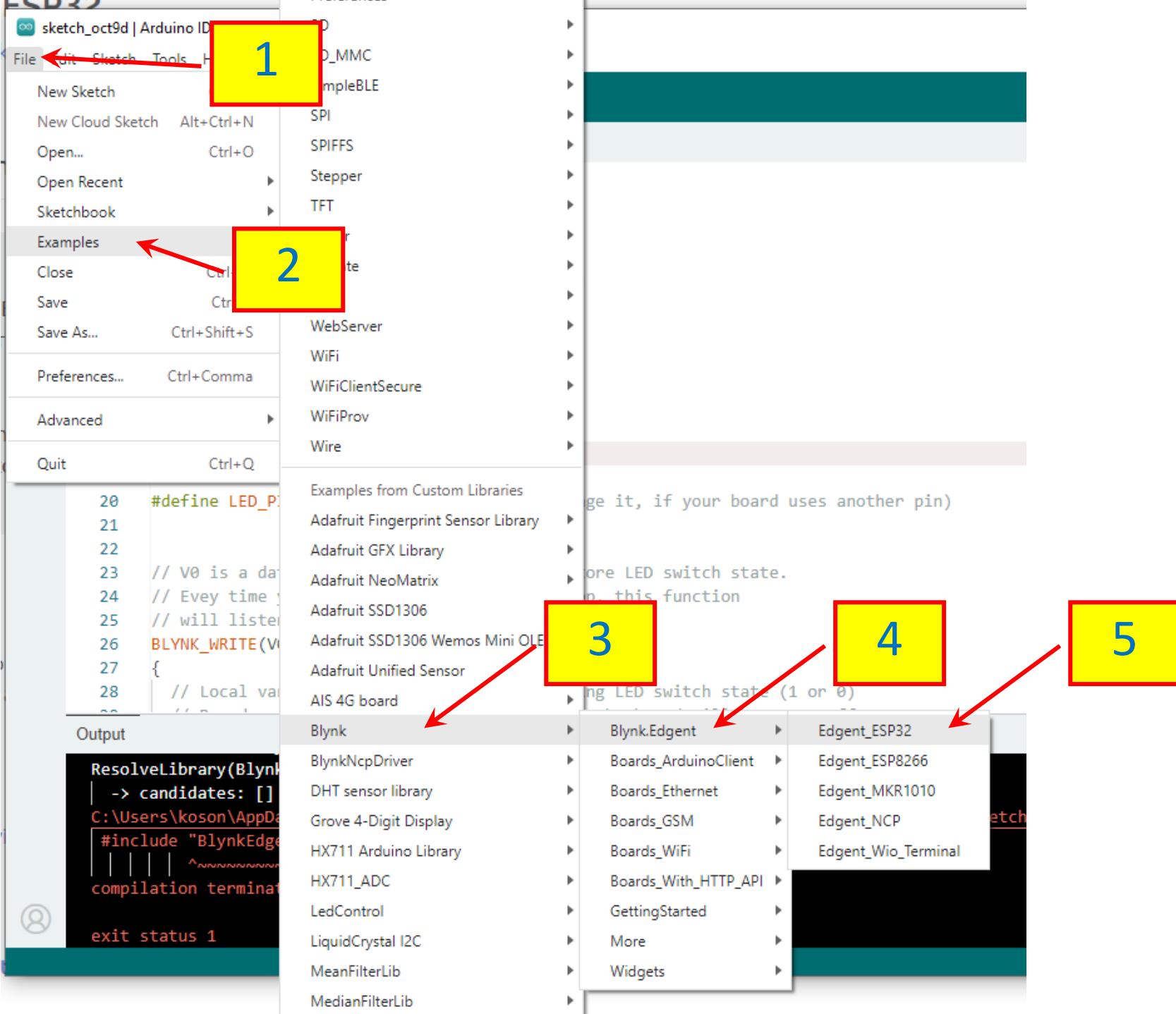
สาเหตุและวิธีการแก้ Error

```
sketch_oct9d.ino
6 // https://blynk.cloud/parse/devices
7
8 #define BLYNK_TEMPLATE_I
9 #define BLYNK_TEMPLATE_N
10
11 #define BLYNK_
12
13 #define BLYNK_
14 // #define BLYN
15
16 #define APP_DEBUG
17
18 #include "BlynkEdgent.h"
19
20 #define LED_PIN 2 // Use pin 2 for LED (change it, if your board uses another pin)
21
22
23 // V0 is a datastream used to transfer and store LED switch state.
24 // Every time you use the LED switch in the app, this function
25 // will listen and update the state on device
26 BLYNK_WRITE(V0)
27 {
28     // Local variable `value` stores the incoming LED switch state (1 or 0)
29 }
```

Output

```
ResolveLibrary(BlynkEdgent.h)
| -> candidates: []
C:\Users\koson\AppData\Local\Temp\.arduinoIDE-unsaved202399-29372-um1089.ajjv\sketch_oct9d\sketch_oct9d.ino:18:10: fatal error: BlynkEdgent.h: No such file
| #include "BlynkEdgent.h"
| | | | ^~~~~~
compilation terminated.

exit status 1
```





ESP32 Dev Module



```
Edgent ESP32.ino BlynkEdgent.h BlynkState.h ConfigMode.h ConfigStore.h Console.h Indicator.h OTA.h ResetButton.h Settings.h
```

```
1 // **** Blynk is a platform with iOS and Android ar
2 // ESP32, Arduino, Raspberry Pi and the likes over
3 // You can easily build mobile and web interfaces f
4 // projects by simply dragging and dropping widge
5
6
7     Downloads, docs, tutorials: https://
8     Sketch generator: https://
9     Blynk community: https://
10    Follow us: https://
11    | | | | | | | | | | | | | | | | | | | | | |
12    | | | | | | | | | | | | | | | | | | | | | |
13    | | | | | | | | | | | | | | | | | | | | | |
14    | | | | | | | | | | | | | | | | | | | | | |
15    | | | | | | | | | | | | | | | | | | | | | |
16    | | | | | | | | | | | | | | | | | | | | | |
17    | | | | | | | | | | | | | | | | | | | | | |
18    | | | | | | | | | | | | | | | | | | | | | |
19    | | | | | | | | | | | | | | | | | | | | | |
20    | | | | | | | | | | | | | | | | | | | | | |
21
22    /* Fill in information from your Blynk Template here */
23    /* Read more: https://bit.ly/BlynkInject */
24    //#define BLYNK_TEMPLATE_ID "TMPxxxxxx"
25    //#define BLYNK_TEMPLATE_NAME "Device"
26
27    #define BLYNK_FIRMWARE_VERSION "0.1.0"
28
29    #define BLYNK_PRINT Serial
30    //#define BLYNK_DEBUG
```

All files here



Edgent_ESP32.ino BlynkEdgent.h BlynkState.h ConfigMode.h ConfigStore.h Console.h Indicator.h OTA.h ResetButton.h Settings.h ...

```
1 // *** MAIN SETTINGS ***
2 // Replace this block with correct template settings.
3 // You can find it for every template here:
4 //
5 //
6 // https://blynk.cloud/dashboard/templates
7
8 #define BLYNK_TEMPLATE_ID "TMPL6_Pbw6fWg"
9 #define BLYNK_TEMPLATE_NAME "LED ESP32"
10
11 #define BLYNK_FIRMWARE_VERSION      "0.1.0"
12
13 #define BLYNK_PRINT Serial
14 //#define BLYNK_DEBUG
15
16 #define APP_DEBUG
17
18 #include "BlynkEdgent.h"
19
20 #define LED_PIN 2 // Use pin 2 for LED (change it, if your board uses another pin)
21
22
23 // V0 is a datastream used to transfer and store LED switch state.
24 // Every time you use the LED switch in the app, this function
25 // will listen and update the state on device
26 BLYNK_WRITE(V0)
27 {
28     // Local variable `value` stores the incoming LED switch state (1 or 0)
29     // Based on this value, the physical LED on the board will be on or off:
30     int value = param.asInt();
```

Copy Code จากตัวอย่าง มาวางใน
ไฟล์นี้ (Edgent_ESP32.ino)
แล้ว build และ upload project

New Device Activation

1 Firmware upload

2 Scan QR code

3 Device activation

Upload provided firmware to your device

Arduino IDE Platformio

1 Download the .zip file [!\[\]\(a117e00aa367c00a8bbb72cb7f59fe3a_img.jpg\)](#) and import the project into your IDE

2 In **Edgent_Blynk_ESP32_LED.ino** replace the default settings with these configuration values:

```
#define BLYNK_TEMPLATE_ID "TMPL6_Pbw6fWg"  
#define BLYNK_TEMPLATE_NAME "LED ESP32"
```

 Copy

3 Upload the provided code example to your device

 Need help?

Close

Firmware Uploaded ✓

New Device Activation



Firmware upload

2

Scan QR code

3

Device activation

Scan this QR code with your smartphone



ⓘ Can't scan the QR?

ถ้ายังไม่ติดตั้ง App Blynk IoT ก็
จะต้องติดตั้ง App ก่อน

ทำตามขั้นตอนใน App
ซึ่งจะให้ทำ provision กับ WiFi
network

← Back

Close

Next →

B

My organization - 7465AH

Q

← Back

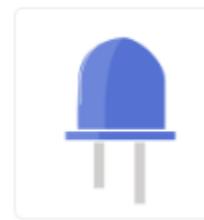
Search



1 Device



LED ESP32 8FNP



LED ESP32 8FNP

Online

...

BlackCat

My organization - 7465AH

Add Tag

Dashboard

Timeline

Device Info

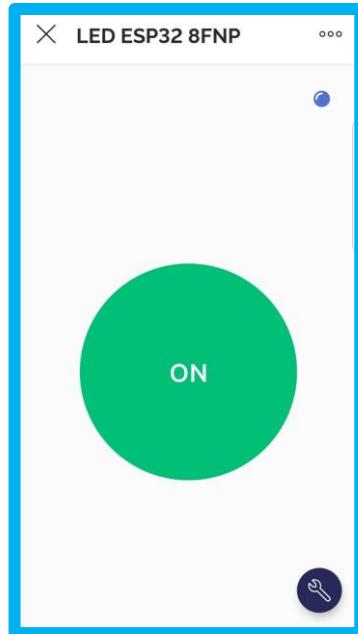
Metadata

Actions Log

LED



On



สามารถ sync หลอด LED
พร้อมกับ App บนมือถือได้

Customize project



My organization - 7465AH



MY TEMPLATES



My Templates

1



BLUEPRI

BETA



All Blueprints



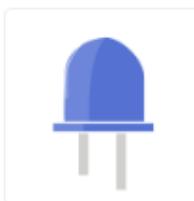
Templates

+ New Template

Search Templates

LED ESP32
1 Device

2



LED ESP32

Blink an LED with ESP32 (with WiFi provisioning & OTA)

TMPL6_Pbw6fWg

...

Edit



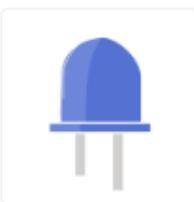
[Home](#) [Datastreams](#) [Web Dashboard](#) [1](#) [Automations](#) [Metadata](#) [Events](#) [Mobile Dashboard](#)

Search datastream

Id	Name	Alias	Color	Pin	Data Ty...	Units	Is Raw	Min	Max	...
1	LED switch state	LED switch state		V0	Integer		false	0	1	...



B



LED ESP32

Blink an LED with ESP32 (with WiFi provisioning & OTA)

TMPL6_Pbw6fWg

...

Cancel

Save And Apply



Home

Datastreams

Web Dashboard

Automations

Metadata

Events

Mobile Dashboard



Search datastream

1 Datastream



Id



Name



Alias



Color



Pin



Data Ty...



U

Location

UPGRADE



1

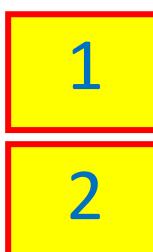
LED switch state

LED switch state



V0

Integer



1



2

+ New Datastream

Virtual Pin

Enum

Location

UPGRADE

Digital Pin

Analog Pin



LED ESP32

Blink an LED with ESP32 (with WiFi provisioning & OTA)



Cancel

Save And Apply



Home

Data



Virtual Pin Datastream

NAME



Temperature

ALIAS

Temperature



PIN

V1

DATA TYPE

Integer

UNITS

Celsius, °C

+ New Datastream

Cancel

Create



LED ESP32



[Blink an LED with ESP32 \(with WiFi provisioning & OTA\)](#)
TMPL6_Pbw6fWg

...

Cancel

Save And Apply



Home Datastreams Web Dashboard Automations Metadata Events Mobile Dashboard

i

Search datastream

+ New Datastream

2 Datastreams

<input type="checkbox"/>	ID	Name	Alias	Color	Pin	Data Ty...	Units	Actions
	1	LED switch state	LED switch state		V0	Integer		
	2	Temperature	Temperature		V1	Integer	°C	

Region: sgp1 [Privacy Policy](#)

B

LED ESP32

Blink an LED with ESP32 (with WiFi provisioning & OTA)

TMPL6_Pbw6fWg

...

Edit[Home](#)[Datastreams](#)[Web Dashboard](#)[Automation](#)[Metadata](#)[Events](#)[Mobile Dashboard](#)

1

2

This is how the device page will look like for actual devices.



Device name Online

Device Owner Company Name

[Tag](#) 

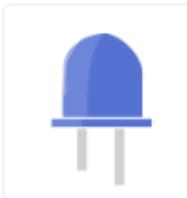
[Dashboard](#)

LED (V0)

Off



Region: sgp1 [Privacy Policy](#)

B

LED ESP32

Blink an LED with ESP32 (with WiFi provisioning & OTA)

TMPL6_Pbw6fWg

...

Cancel

Save And Apply



Home

Datastreams

Web Dashboard

Automations

Metadata

Events

Mobile Dashboard



Widget Box

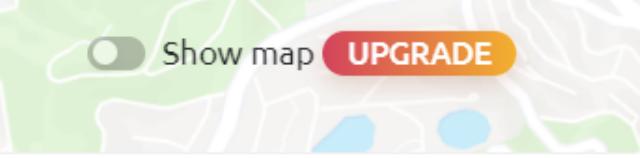
3 of 10 widgets



Device Owner

Company Name

Tag X



DISPLAY

LED



LED (V0)



Off



Label

112



Label

2

Gauge



1. เลือน Widget Box ลงมานี่ถึง
Label แล้วสามารถว่างใน Dashboard



2

Month 3 Months Custom

Region: sgp1 Privacy Policy

B

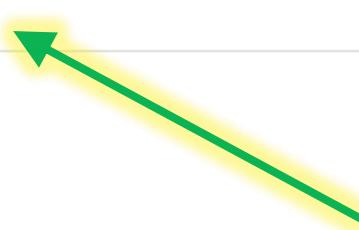
Label Settings i

TITLE (OPTIONAL)

Temperature 

1

Datastream

Temperature (V1) 



2

CONTENT ALIGNMENT



WIDGET BACKGROUND

Change color based on value



LEVEL



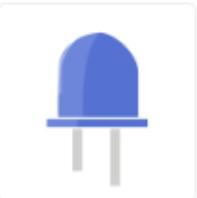
Temperature (V1)

--

3

Cancel

Save

B

LED ESP32

💡 Blink an LED with ESP32 (with WiFi provisioning & OTA)

TMPL6_Pbw6fWg

...

Cancel

Save And Apply



Home

Datastreams

Web Dashboard

Automations

Metadata

Events

Mobile Dashboard

i

Widget Box

3 of 10 widgets

CONTROL

Switch



Slider



Number Input

**Device name**

Online

Device Owner

Company Name

Tag X



Dashboard



Last Hour

6 Hours

1 Day

1 Week

1 Month



3 Months



Custom



LED (V0)

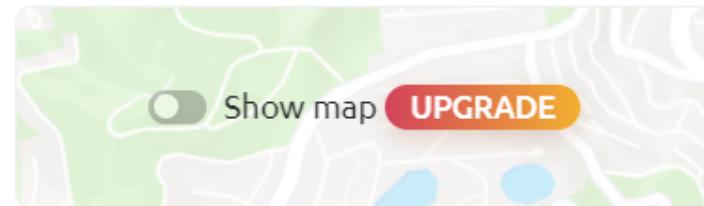


Off



Tempera... (V1)

0 °C



Source code

<https://gist.github.com/koson/252e2439c6a8db0fa0d315e3269c88b7>

