



<https://www.facebook.com/lamloeicom>



WIFI

- WiFi SSID IamloeiWIFI
- WiFi Pass 123456789

<https://github.com/Iamloei/present2>

<https://192.168.4.100:9443> หรือ 8080 (Node32Lite)

Admin admin@blynk.cc

Pass admin



อุปกรณ์ที่ใช้

Notebook (แนะนำ Windows)

Mobile มือถือระบบ Android หรือ IOS (แนะนำ Android)

Node32Lite

โปรแกรมอินๆ เช่น 7-zip

อุปกรณ์ต่อพ่วงอินๆ เช่น สายไฟ โปรดิบอร์ด

Email หรือเป็นสมาชิก Facebook



Blynk

DOWNLOAD FREE BLYNK APP TODAY:

พน>
พน>

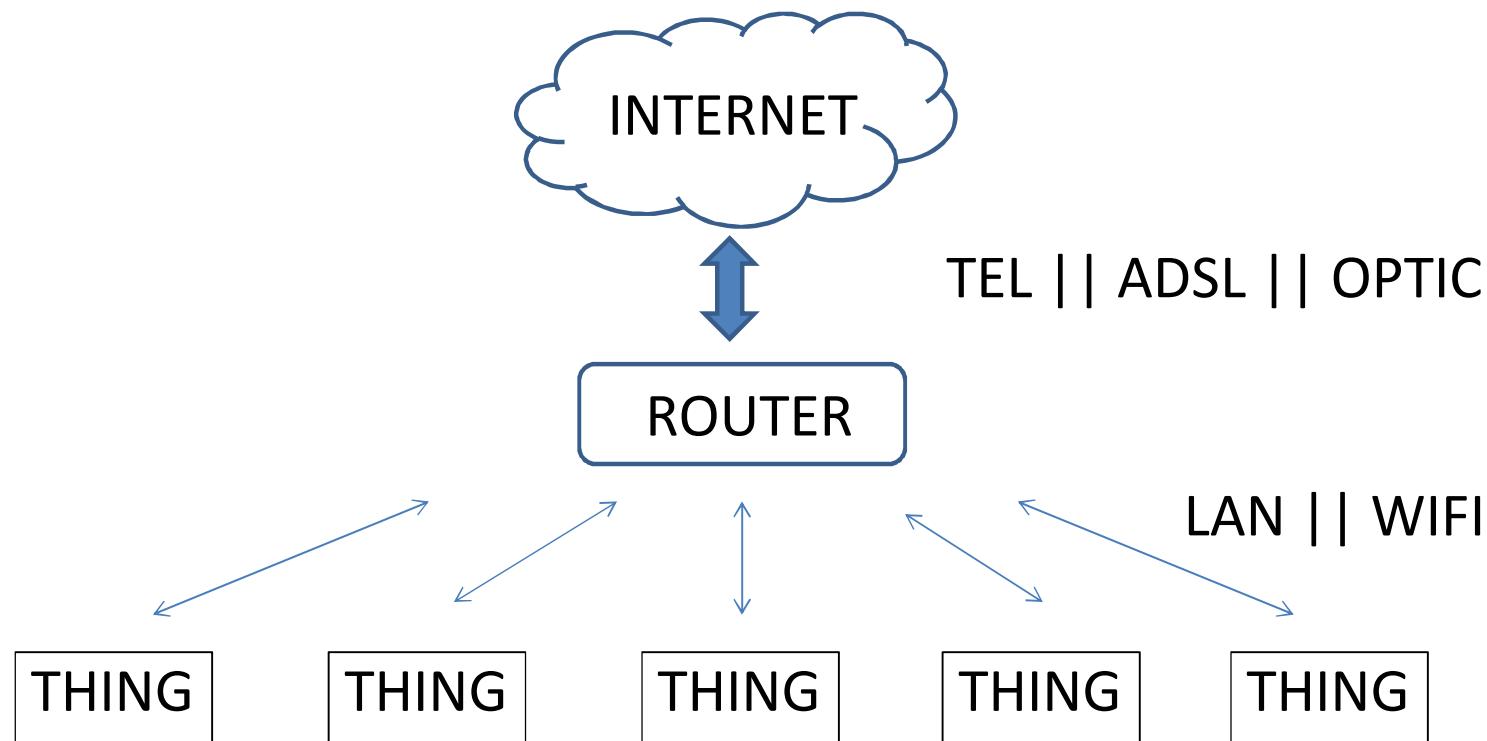


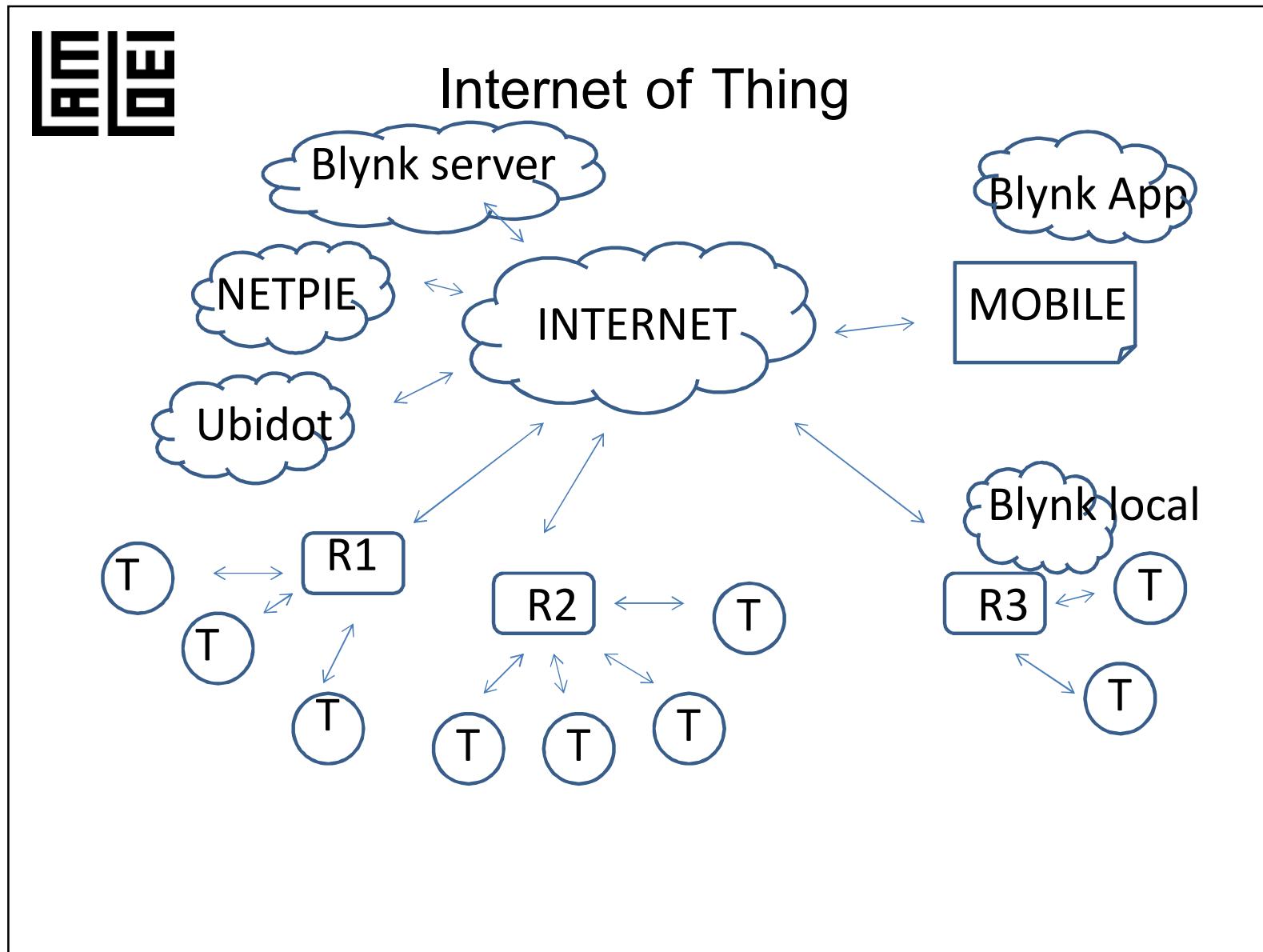
<https://www.blynk.cc/>

<https://github.com/blynkkk/>



Internet of Thing





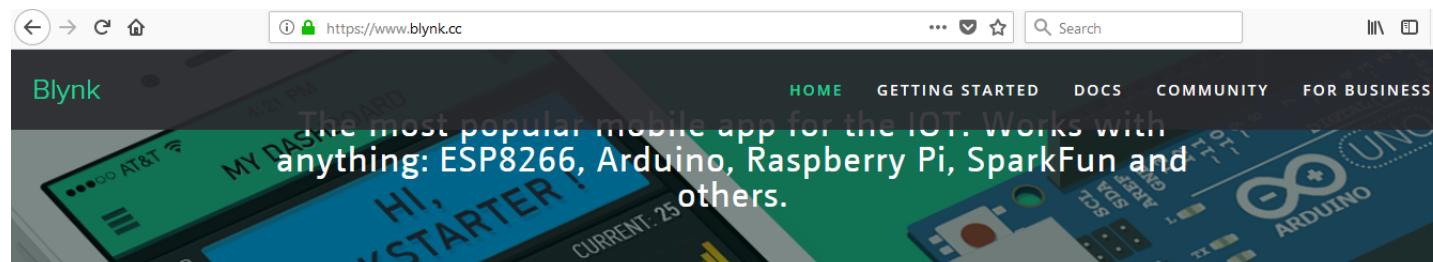


Agenda Day 1

1. พื้นฐานโปรแกรม
2. Arduino IDE, ESP32
3. Blynk Server, Blynk Library, Blynk Mobile



<https://www.blynk.cc/>



Every project made with Blynk can be branded, and published to App Store and Google Play with your icon and app name.

Interested? Click [here](#)

DOWNLOAD **FREE** BLYNK APP TODAY:



<https://github.com/blynkkk>

<https://github.com/blynkkk>

Overview **Repositories 10** Projects 0 Stars 11 Followers 1.1k Following 0

Find a repository... Type: All ▾ Language: All ▾

blynk-server

Blynk is an Internet of Things Platform aimed to simplify building mobile and web applications for the Internet of Things. Easily connect 400+ hardware models like Arduino, ESP8266, ESP32, Raspberry...

Star

java iot netty blynk-server internet-of-things arduino raspberry-pi

● Java ★ 1,309 450 GNU General Public License v3.0 Updated a day ago



android-texts

This repository contains Blynk texts and localizations. You are welcome to contribute.

Star

★ 3 5 MIT License Updated 2 days ago



blynk-library

Blynk library for embedded hardware. Works with Arduino, ESP8266, Raspberry Pi, Intel Edison/Galileo, LinkIt ONE, Particle Core/Photon, Energia, ARM mbed, etc.

Star

arduino esp8266 esp32 particle-photon embedded hardware mbed

● C++ ★ 2,063 546 MIT License 1 issue needs help Updated 7 days ago



Blynk IoT platform
blynkkk

Follow

Block or report user

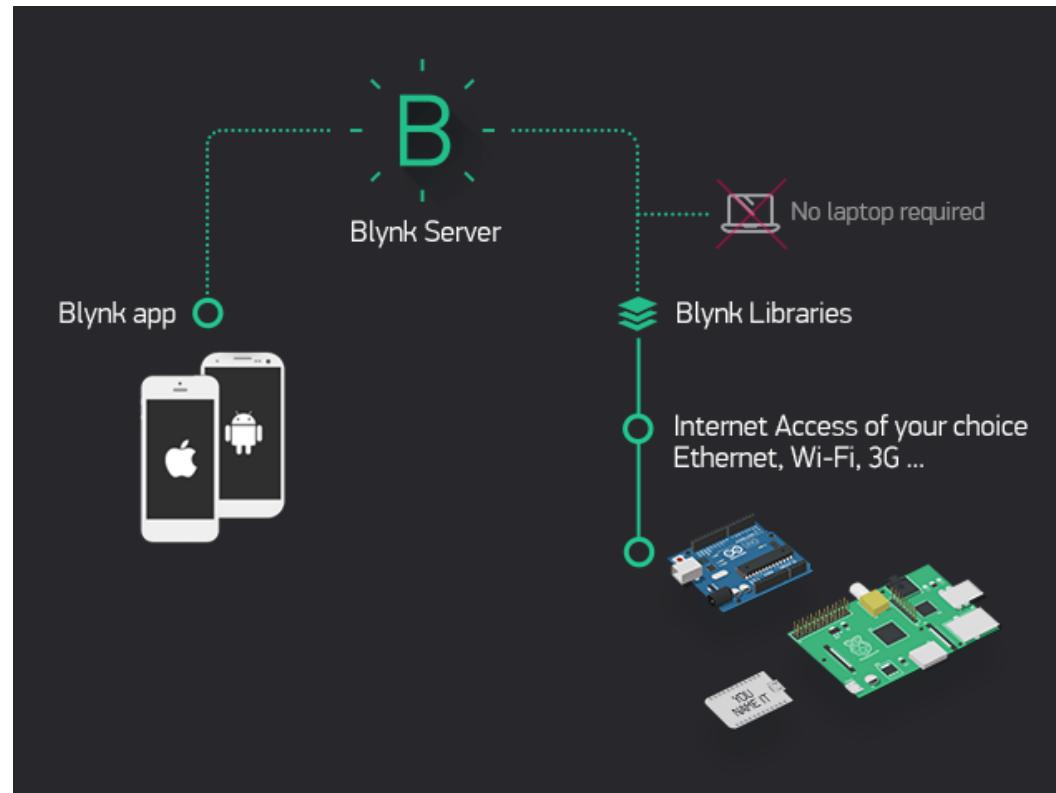
★ PRO

The most popular IoT platform for connecting your devices to the cloud, designing apps to control them, and managing your deployed products at scale.

● Blynk
New York, US – Kiev, Ukraine
<https://blynk.io>



Blynk





ดาวน์โหลดและติดตั้ง Blynk Server

1. Java version 9 (หรือเวอร์ชัน 8 ขึ้นไป) และติดตั้ง
2. server-0.41.3-java8.jar



ดาวน์โหลด Java

เปิด Command Prompt

พิมพ์คำสั่ง `java -version`

```
C:\>java -version
java version "9.0.4"
Java(TM) SE Runtime Environment (build 9.0.4+11)
Java HotSpot(TM) 64-Bit Server VM (build 9.0.4+11, mixed mode)
```

ดาวน์โหลด `jdk-9.0.4_windows-x64_bin.exe`



[http://www.oracle.com/technetwork/java/](http://www.oracle.com/technetwork/java/javase/downloads/index.html)

javase/downloads/index.html

The screenshot shows the Oracle Java SE Downloads page. At the top, there's a navigation bar with links for Overview, Downloads (which is highlighted), Documentation, Community, Technologies, and Training. To the left, a sidebar lists categories like Java SE, Java EE, Java ME, Java SE Advanced & Suite, Java Embedded, Java DB, Web Tier, Java Card, Java TV, New to Java, Community, and Java Magazine. The main content area features two download cards: one for "Java Platform (JDK) 9" and another for "NetBeans with JDK 8". Below these, a section for "Java Platform, Standard Edition" highlights "Java SE 9.0.4", noting it includes bug fixes and recommending an upgrade. It provides links for "Installation Instructions" and "Release Notes", and a "JDK DOWNLOAD" button.

<https://github.com/blynkqq/blynk-server/releases>

v0.41.3
12c1460

Fixes, improvements

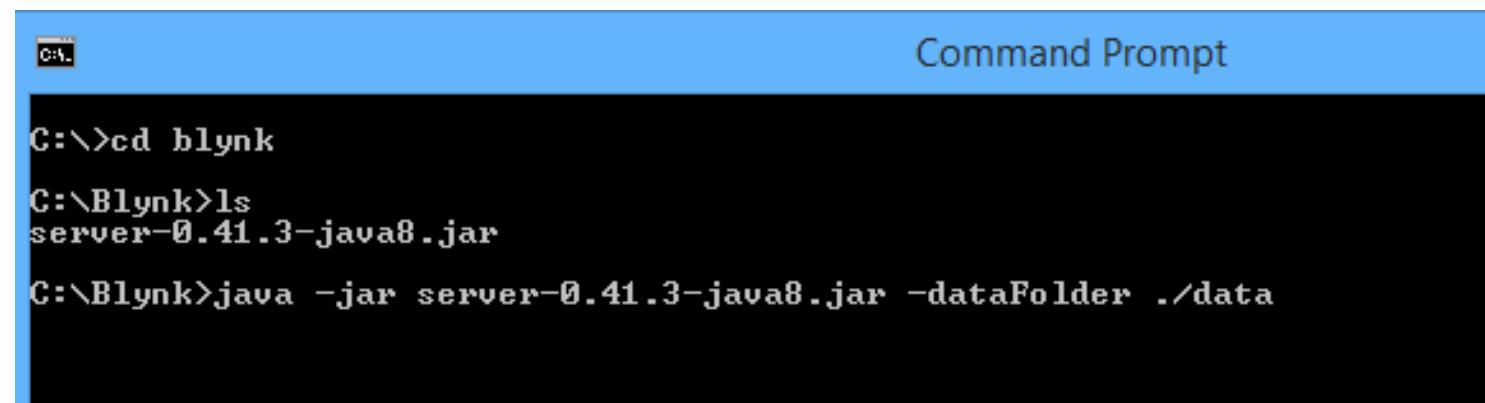
doom369 released this 2 days ago · 6 commits to master since this release

- Less allocations for hot methods;
- Fix for non working offline notifications;
- Mail widget TO fields now have priority over hardcoded value in sketch;
- Fixed log4j2 warning on the server start on Java 11;
- NPE fix in clone handler;
- All dependencies updated;

Assets 4

server-0.41.3-java8.jar	17.7 MB
server-0.41.3.jar	17.7 MB
Source code (zip)	
Source code (tar.gz)	

```
java -jar server-0.41.3-java8.jar -dataFolder ./data
```



The screenshot shows a Windows Command Prompt window with a blue title bar labeled "Command Prompt". The window contains the following text:

```
C:\>cd blynk  
C:\Blynk>ls  
server-0.41.3-java8.jar  
C:\Blynk>java -jar server-0.41.3-java8.jar -dataFolder ./data
```

<https://192.168.1.100:9443/admin>

```
Command Prompt - java -jar server-0.41.3-java8.jar -dataFolder ./data

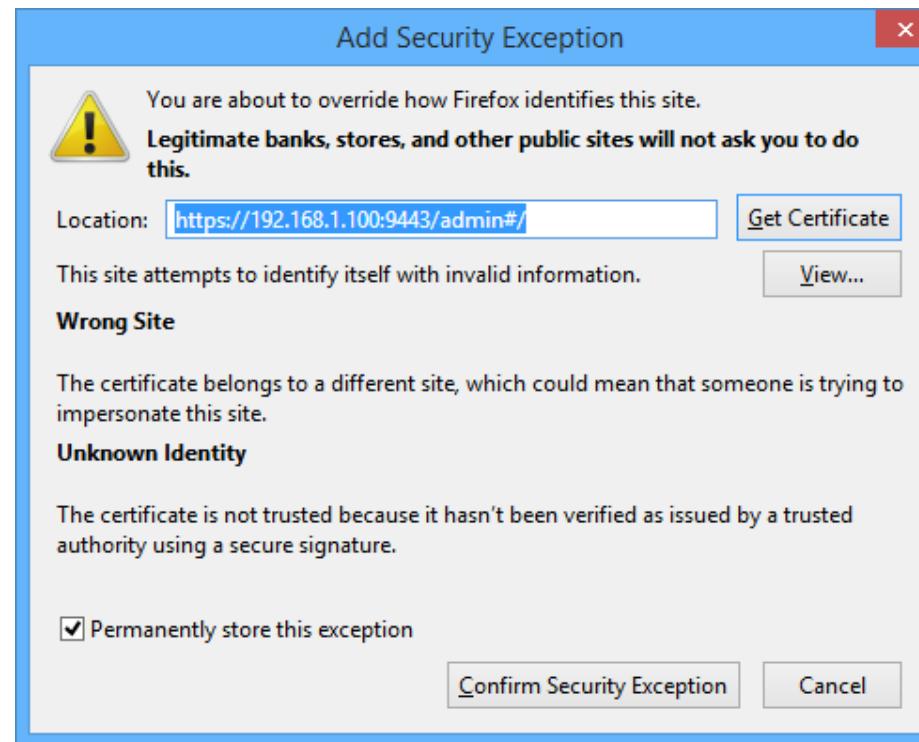
C:\>cd blynk
C:\Blynk>ls
server-0.41.3-java8.jar
C:\Blynk>java -jar server-0.41.3-java8.jar -dataFolder ./data
Blynk Server 0.41.4-SNAPSHOT successfully started.
All server output is stored in folder 'C:\Blynk\\.logs' file.
Your Admin url is https://192.168.1.100:9443/admin
Your Admin login email is admin@blynk.cc
Your Admin password is admin
```

Advanced > Add Exception...

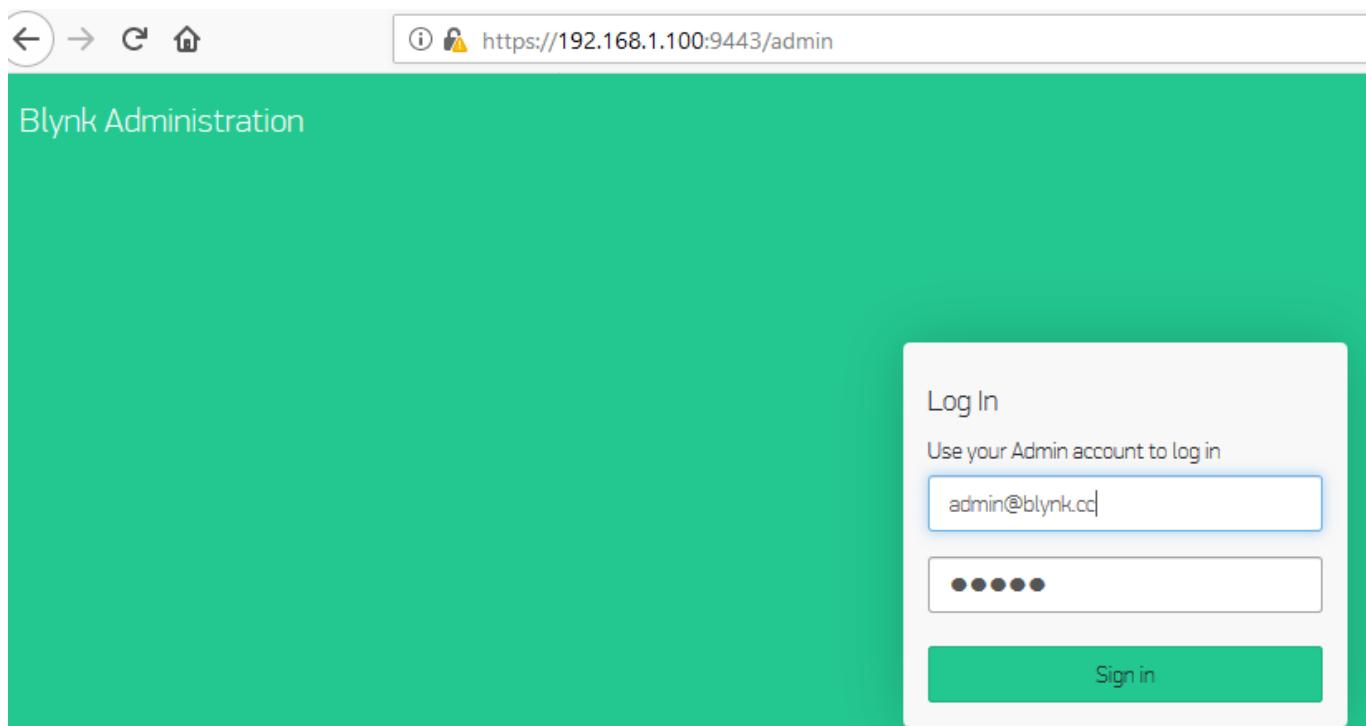
The screenshot shows a Firefox browser window with the following details:

- Address Bar:** https://192.168.1.100:9443/admin#/
- Toolbar:** Includes icons for three dots, a refresh arrow, and a star.
- Search Bar:** A search input field with a magnifying glass icon and the word "Search".
- Content Area:**
 - Icon:** A red padlock icon with a slash through it, indicating an untrusted connection.
 - Title:** Your connection is not secure
 - Text:** The owner of 192.168.1.100 has configured their website improperly. To protect your information from being stolen, Firefox has not connected to this website.
 - Link:** Learn more...
 - Input Field:** An unchecked checkbox labeled "Report errors like this to help Mozilla identify and block malicious sites".
 - Buttons:** "Go Back" (blue) and "Advanced" (gray).

Confirm Security Exception



กรอก User และ Password



Dashboard

The screenshot shows the Blynk Administration interface with a sidebar and a main dashboard area.

Header:

- Navigation icons: back, forward, refresh, and home.
- URL: https://192.168.1.100:9443/admin#/dashboard
- More options icon: three dots.

Blynk Administration Sidebar:

- Users
- Stats >
- Hardware Info >
- Config

Main Dashboard Area:

Dashboard

Realtime stats

1 min request rate	Total registrations	Logged in 24h	Logged in 72h	Hard and App connected	App connections	Hardware connections
0	0	0	0	0	0	0

The screenshot shows the Blynk Administration interface. On the left, there is a sidebar with the Blynk logo and navigation links: **Users**, **Stats**, **Hardware Info**, and **Config**.

The main area has a title **User** at the top. Below it, a section titled **Users list** displays a table with two rows:

	Email	AppName
<input type="checkbox"/>	admin@blynk.cc	Blynk

Below this, another section titled **Edit user "admin@blynk.cc"** shows the user details:

Email	admin@blynk.cc
Name	admin@blynk.cc
Pass
LastModifiedTs	1521298918911
Energy	100000
AppName	Blynk
Region	local
LastLoggedIP	

Handwritten notes in Thai are overlaid on the screenshot:

- คลิก Users (Click Users) - pointing to the **Users** link in the sidebar.
- คลิก admin@blynk.cc (Click admin@blynk.cc) - pointing to the email address in the edit form.
- ปรับค่า Energy (Adjust Energy value) - pointing to the **Energy** field in the edit form, which is highlighted with a red box.



Blynk Folder

This PC > Local Disk (C:) > Blynk

Name	Date modified	Type	Size
backup	17/3/2561 22:01	File folder	
clone	17/3/2561 22:01	File folder	
deleted	17/3/2561 22:01	File folder	
logs	17/3/2561 22:01	File folder	
static	17/3/2561 22:01	File folder	
admin@blynk.cc.Blynk.user	17/3/2561 22:02	USER File	1 KB
server-0.41.3-java8.jar	12/3/2561 6:30	Executable Jar File	17,324 KB

backup

- ไฟล์เดอร์สำรองข้อมูล

clone

- ไฟล์เดอร์คัดสำเนา

deleted

- ไฟล์เดอร์เก็บลิงที่ถูกลบ

logs

- ไฟล์เดอร์สถิติการใช้งาน

static

- ไฟล์เดอร์หน้าเว็บ

admin@blynk.cc.Blynk.user

- ไฟล์ข้อมูลผู้ใช้งาน

server-0.41.3-java8.jar

- ไฟล์วันเซิร์ฟเวอร์

Blynk Library

<https://github.com/blynkkk/blynk-library>

Watch 210 Star 2,063 Fork 546

Code Issues 6 Pull requests 0 Projects 0 Wiki Insights

Blynk library for embedded hardware. Works with Arduino, ESP8266, Raspberry Pi, Intel Edison/Galileo, Linkit ONE, Particle Core/Photon, Energia, ARM mbed, etc. <https://www.blynk.cc/>

arduino esp8266 esp32 particle-photon embedded hardware mbed raspberry-pi bluetooth bluetooth-low-energy serialport
ethernet-shield gsm ota iot internet-of-things espressif iot-platform wifi

1,744 commits 1 branch 31 releases 18 contributors MIT

Branch: master New pull request Create new file Upload files Find File Clone or download ▾

blynkkk Update README.md Latest commit 3b9bee8 7 days ago

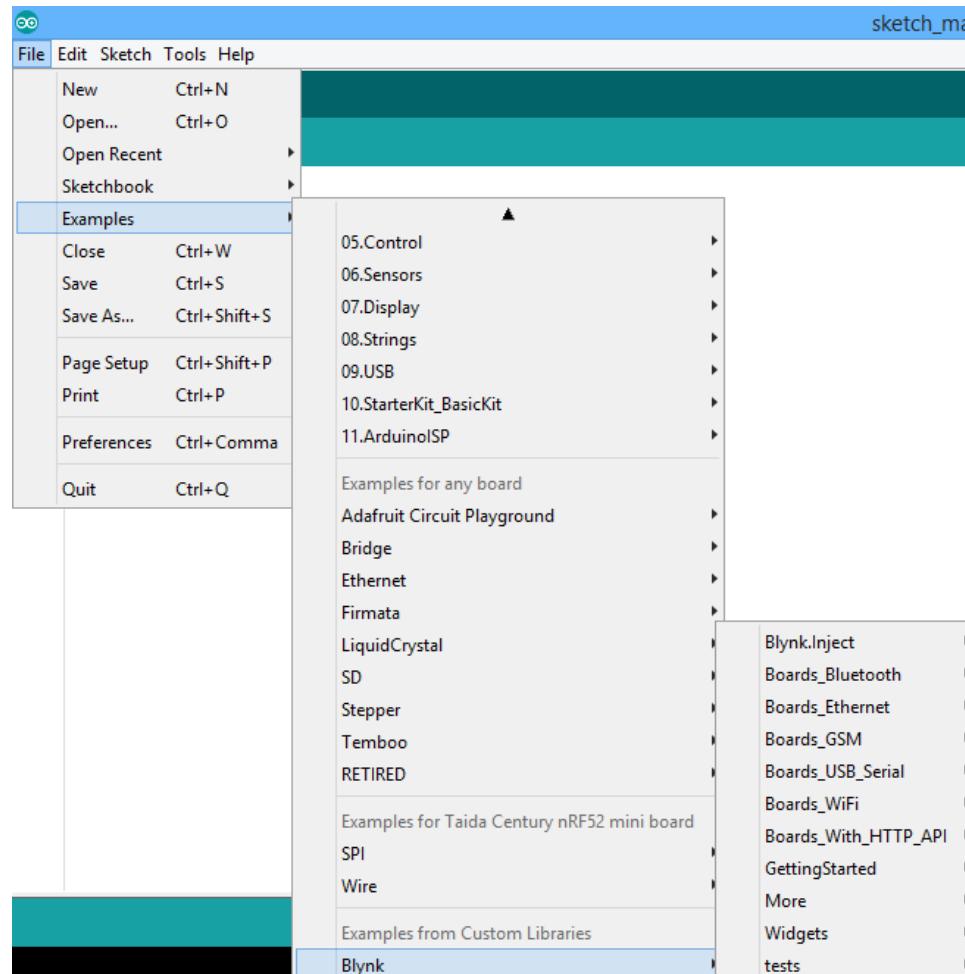
.github	update template [ci skip]	3 years ago
examples	Fix typo	21 days ago
extras	Update README.md	a year ago
linux	Update info message format	a month ago
scripts	Switch SSL port to 443 by default	26 days ago
src	Boost ver	21 days ago
tests	#394 port changed in examples	a year ago
.gitattributes	Add .gitattributes	2 years ago



ແຕກໄຟລ໌ blynk-library-master.zip ໄປທີ່
C:\Users\[admin]\Documents\Arduino\libraries

This PC > Documents > Arduino > libraries				
Name	Date modified	Type	Size	
readme.txt	13/3/2561 17:40	TXT File	1 KB	
blynk-library-master	15/3/2561 2:10	File folder		

File > Examples > Blynk



ແກ່ໄລ ຕິດຕັ້ງບນມືອດີອ Blynk (App Store, Google Play)

Available on the
App Store

Google play

SIGN UP FOR BLYNK NEWS

Get latest news and updates from us:

Blynk is a Platform with iOS and Android apps to control Arduino, Raspberry Pi and the likes over the Internet.

It's a digital dashboard where you can build a graphic interface for your project by simply dragging and dropping widgets.

We really aim to set everything up and control

DRAG-IN-DROP WIDGETS TO CREATE YOUR OWN APP

MANY MANY WIDGETS! AND MORE COMING!

EASY SET-UP LIKE 1-2-3

SHARE YOUR APPS WITH FRIENDS AND FAMILY

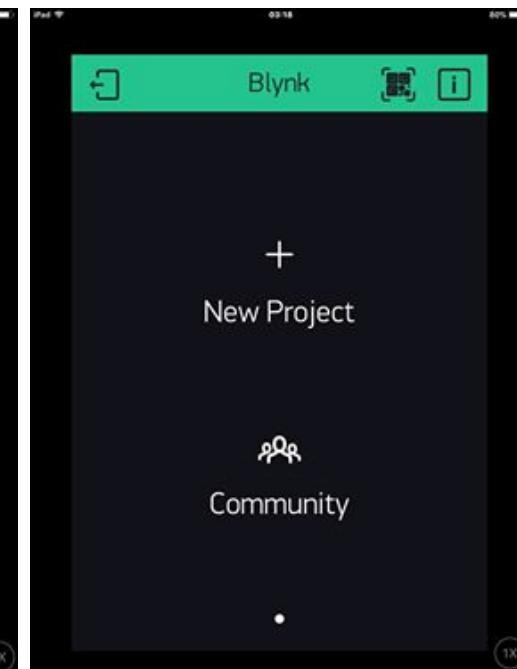
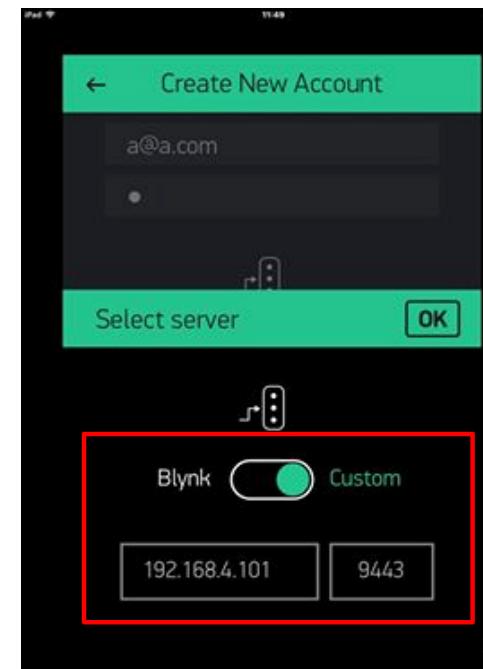
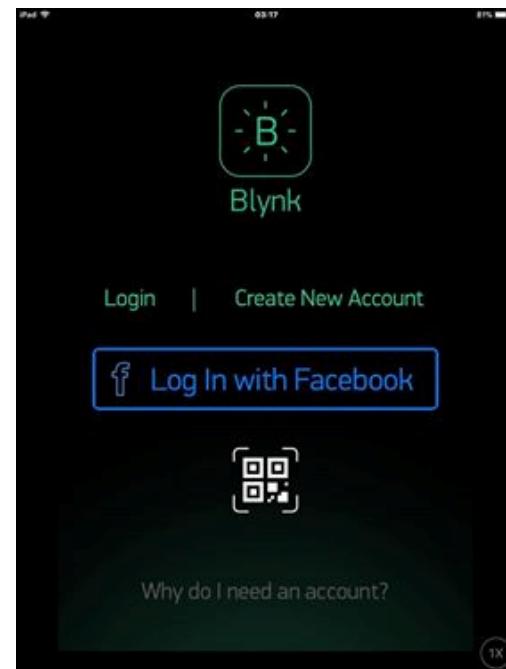
iPhone

Control Arduino, Raspberry Pi, ESP8266, ESP32, Particle Photon and Electron, and many other

ນັກພົມນາ
Blynk Inc



Create New Account (local)



Create New Account

... Select server local

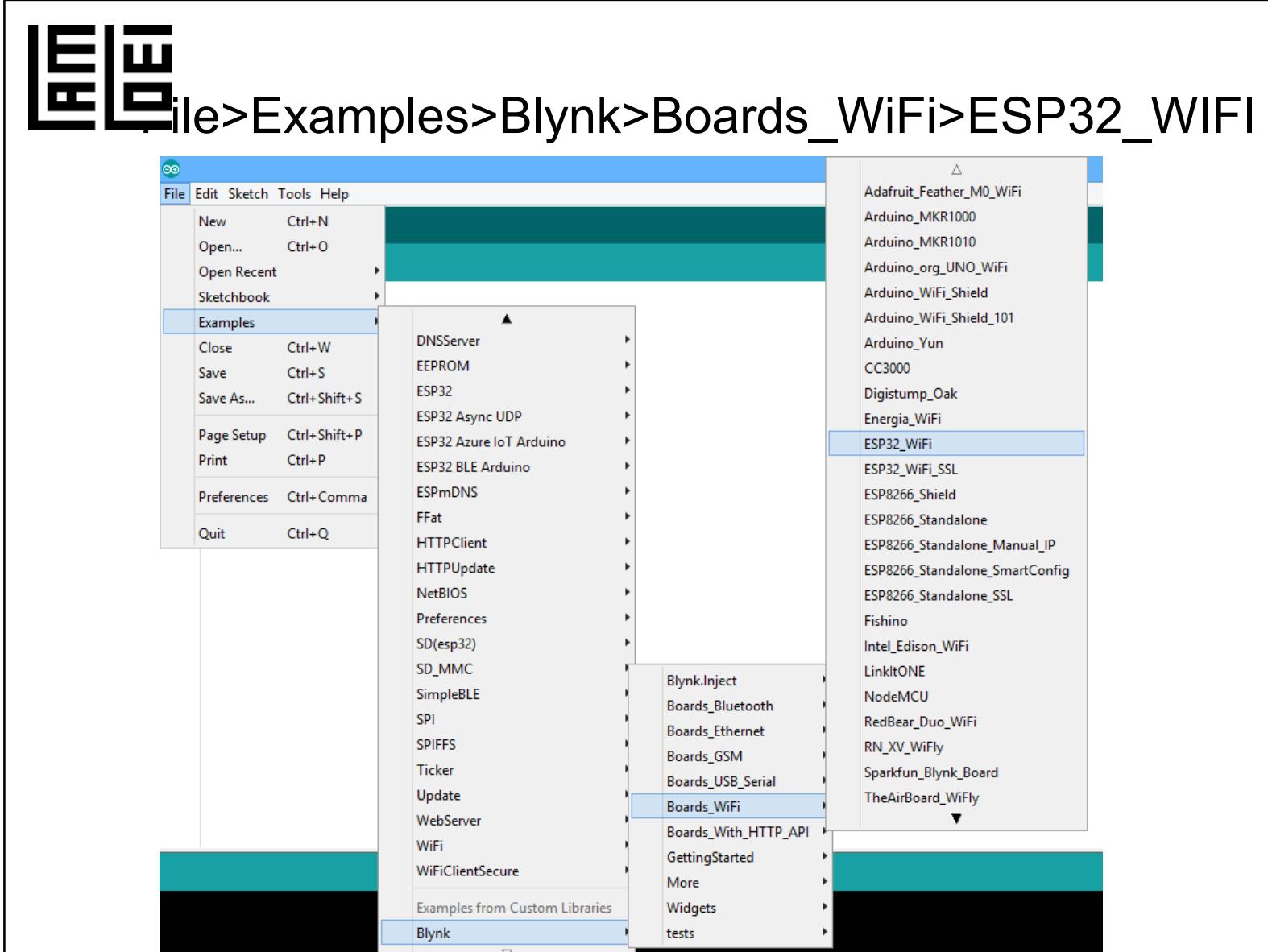
+ New Project

គំណត់កូដលក់ Auth Token

New Project

គំណត់កូដលក់ Auth Token

Copy Auth Token



ปรับโค้ด

```
char auth[] = "3b5fe145897a4fb9842a966312c0f8c5";  
  
char ssid[] = "lamloeiWIFI";  
char pass[] = "123456789";  
  
Serial.begin(115200);  
  
Blynk.begin(auth, ssid, pass, IPAddress(192,168,4,100), 8080);
```

Result

The screenshot shows the Arduino IDE interface with the following details:

Sketch: ESP32_WiFi | Arduino 1.8.8

Code (ESP32_WiFi.ino):

```
33 #define BLYNK_PRINT Serial
34
35
36 #include <WiFi.h>
37 #include <WiFiClient.h>
38 #include <BlynkSimpleEsp32.h>
39
40 // You should get Auth Token in the Blynk App.
41 // Go to the Project Settings (nut icon).
42 char auth[] = "3b5fe145897a4fb9842a966312c0f8c5";
43
44 // Your WiFi credentials.
45 // Set password to "" for open networks
46 char ssid[] = "lamloeIWIFI";
47 char pass[] = "123456789";
48
49 void setup()
50 {
51     // Debug console
52     Serial.begin(115200);
53
54     Blynk.begin(auth, ssid, pass, IPAddress(192,168,4,100), 8080);
55 }
56
57 void loop()
58 {
59     Blynk.run();
60 }
```

Serial Monitor Output (COM7):

```
[33] Connecting to lamloeIWIFI
[1162] Connected to WiFi
[1162] IP: 192.168.4.111
[1162]

/ _ ) / _ \ _ / / _ \
/ _ / / / / _ \ \ _ /
/ _ / / \ _ , / / / / \ _ \
/ _ / v0.6.1 on ESP32

[1168] Connecting to 192.168.4.100
[1382] Ready (ping: 8ms).
```

Serial Monitor Settings:

- Autoscroll (checked)
- Show timestamp (unchecked)
- Newline (dropdown set to Newline)
- 115200 baud (dropdown set to 115200 baud)



สรุป

- Local blynk

```
Blynk.begin(auth, ssid, pass, IPAddress(192,168,4,100), 8080);
```

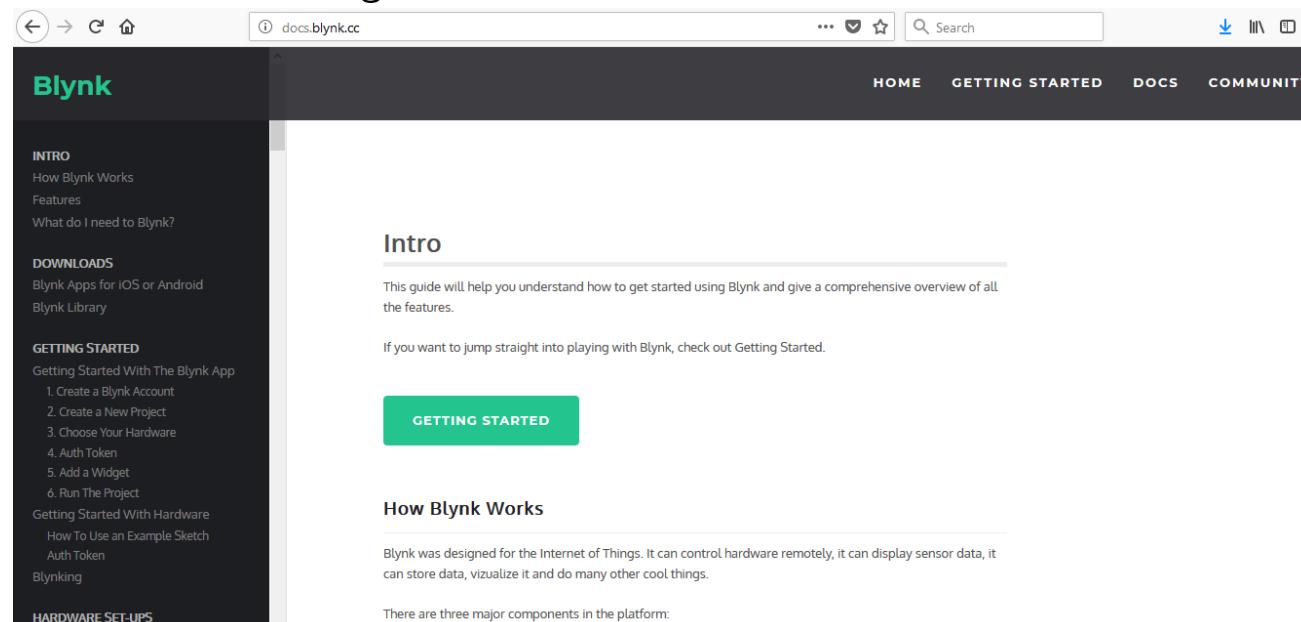
- Server blynk.cc

```
Blynk.begin(auth, ssid, pass);
```



<http://docs.blynk.cc>

- Blynk
- Virtual PIN, Widget



The screenshot shows a web browser displaying the Blynk documentation site at docs.blynk.cc. The page has a dark header with the Blynk logo and navigation links for HOME, GETTING STARTED, DOCS, and COMMUNITY. The main content area features a sidebar with links to INTRO, DOWNLOADS, and various HOW TO guides. The main content section is titled "Intro" and provides an overview of the platform's features. A prominent green "GETTING STARTED" button is visible. Below the intro, there's a section titled "How Blynk Works" with a brief description of the platform's capabilities.

Blynk

INTRO

- How Blynk Works
- Features
- What do I need to Blynk?

DOWNLOADS

- Blynk Apps for iOS or Android
- Blynk Library

GETTING STARTED

- Getting Started With The Blynk App
 - 1. Create a Blynk Account
 - 2. Create a New Project
 - 3. Choose Your Hardware
 - 4. Auth Token
 - 5. Add a Widget
 - 6. Run The Project
- Getting Started With Hardware
 - How To Use an Example Sketch
 - Auth Token
 - Blynking

HARDWARE SET-UPS

Intro

This guide will help you understand how to get started using Blynk and give a comprehensive overview of all the features.

If you want to jump straight into playing with Blynk, check out Getting Started.

GETTING STARTED

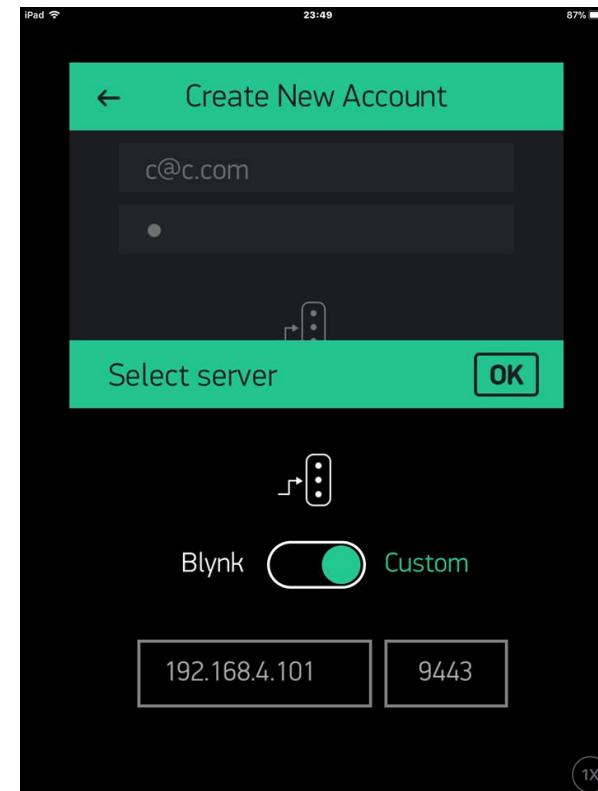
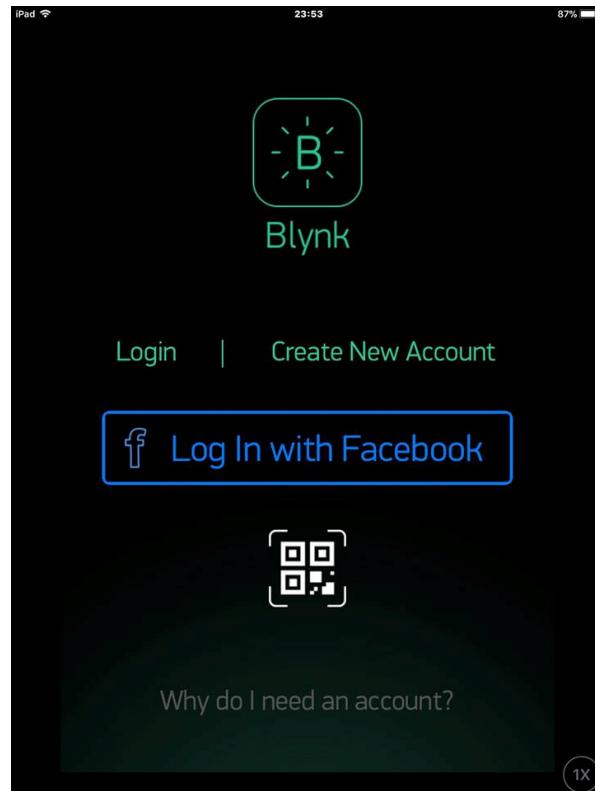
How Blynk Works

Blynk was designed for the Internet of Things. It can control hardware remotely, it can display sensor data, it can store data, visualize it and do many other cool things.

There are three major components in the platform:



เปิด Blynk App และ Create New Account



Select Server เป็น 192.168.4.101 port 9443

เป็น IP ADDRESS ของเครื่องคุณ

RAM

Users list

Blynk Administration

- Users
- Stats >
- Hardware Info >
- Config

Users list

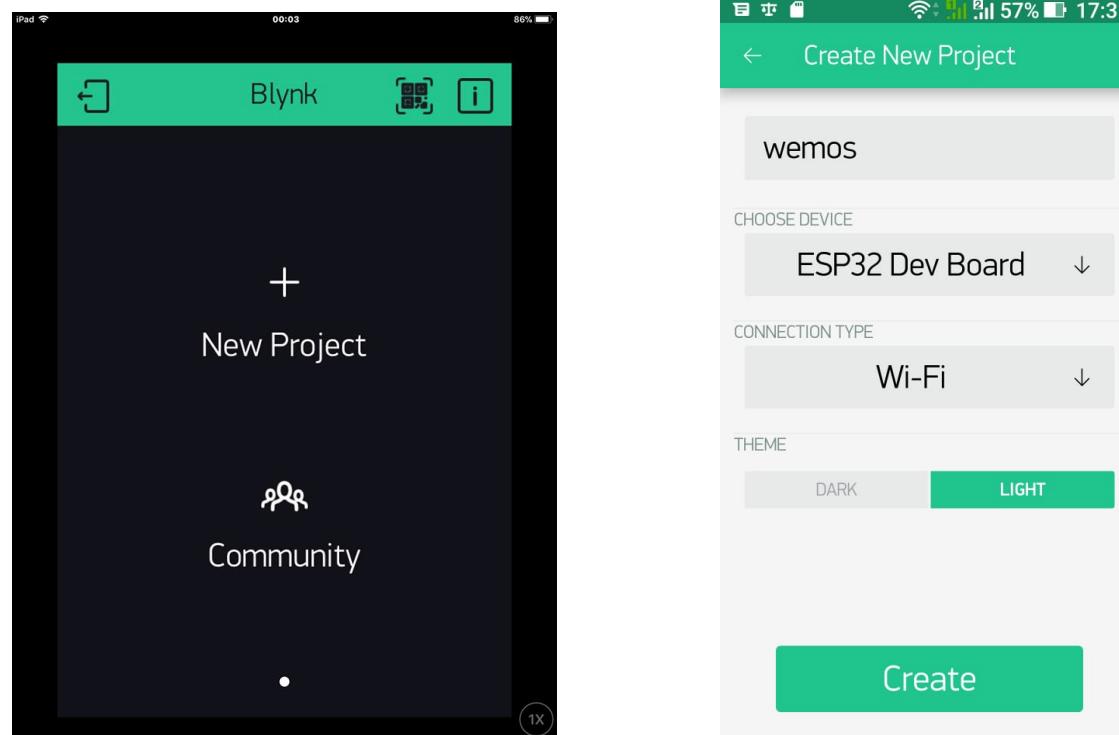
Email	AppName	# Of Projects	LastModifiedTs
c@c.com	Blynk	0	2018-03-17 16:57:32
b@b.com	Blynk	1	2018-03-17 16:25:30
a@a.com	Blynk	1	2018-03-17 08:03:25
admin@blynk.cc	Blynk	0	2018-03-16 16:13:36

Refresh ที่ users dashboard จะปรากฏ user ใหม่

35

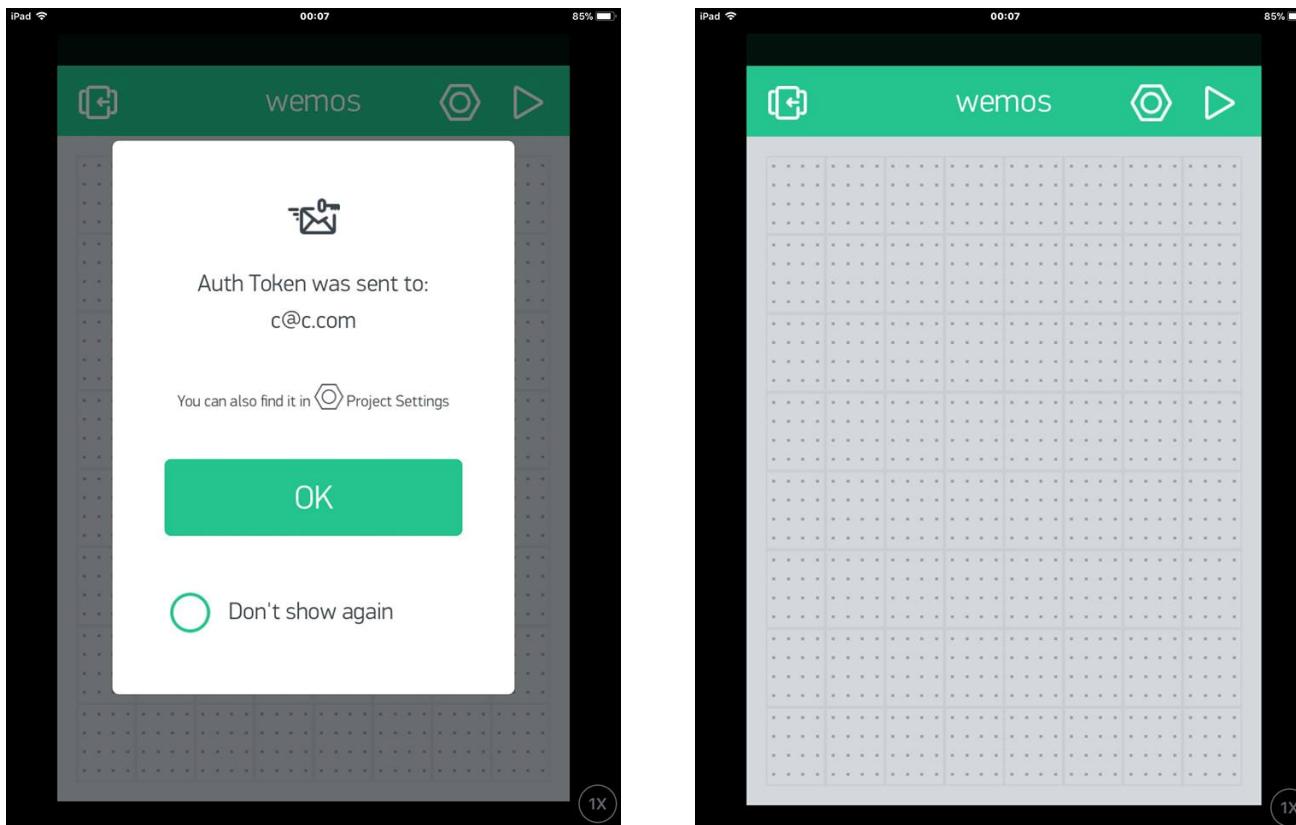


New Project แล้วตั้งชื่อโปรเจค



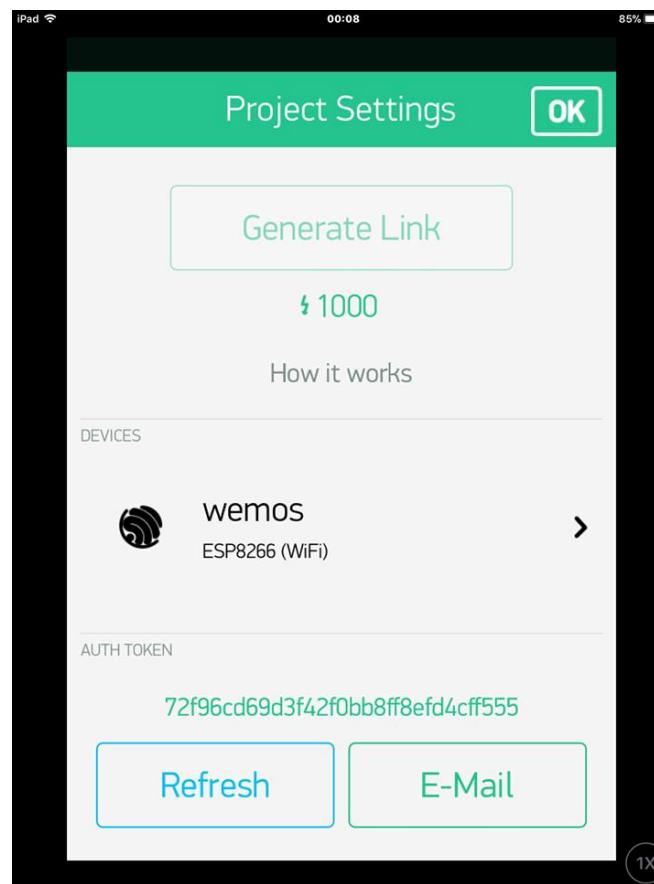


คลิก ok แล้วคลิกปุ่ม หกเหลี่ยม





คัดลอก Auth Token





File>Examples>Blynk>Boards_WiFi>ESP32_WIFI

The screenshot shows the Arduino IDE interface with the following details:

- Sketch Name:** ESP32_WIFI
- IDE Version:** Arduino 1.8.8
- Serial Monitor Port:** COM7
- Serial Monitor Baud Rate:** 115200 baud
- Sketch Code (Lines 42-54 highlighted):**

```
33 #define BLYNK_PRINT Serial
34
35
36 #include <WiFi.h>
37 #include <WiFiClient.h>
38 #include <BlynkSimpleEsp32.h>
39
40 // You should get Auth Token in the Blynk App.
41 // Go to the Project Settings (nut icon).
42 char auth[] = "3b5fe145897a4fb9842a966312c0f8c5";
43
44 // Your WiFi credentials.
45 // Set password to "" for open networks
46 char ssid[] = "lamloeiWIFI";
47 char pass[] = "123456789";
48
49 void setup()
50 {
51     // Debug console
52     Serial.begin(115200);
53
54     Blynk.begin(auth, ssid, pass, IPAddress(192,168,4,100), 8080);
55 }
56
57 void loop()
58 {
59     Blynk.run();
60 }
```

- Serial Monitor Output:**

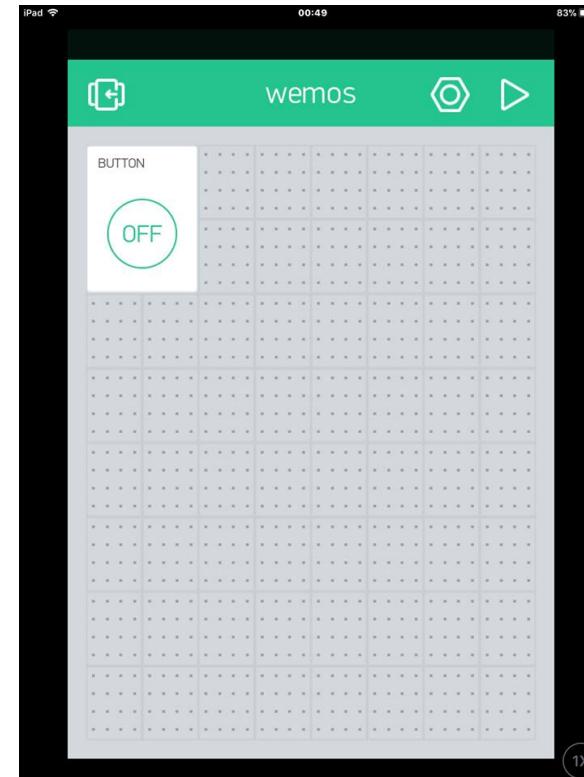
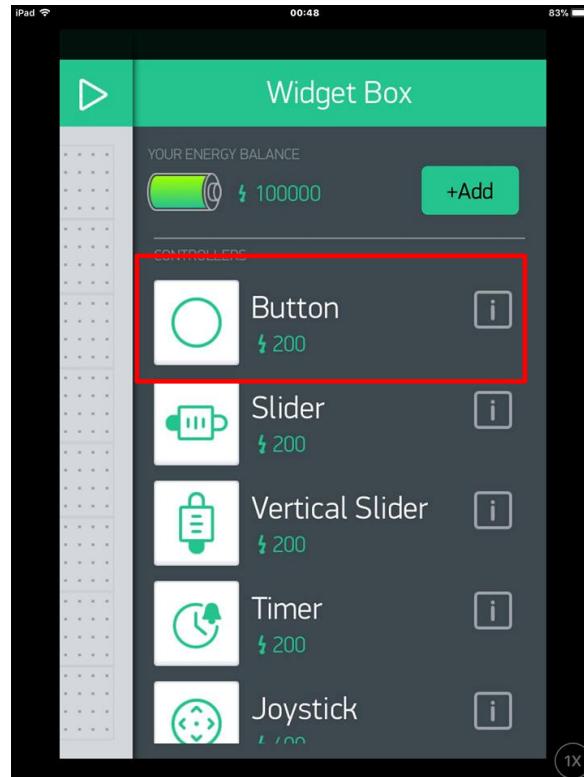
```
[33] Connecting to lamloeiWIFI
[1162] Connected to WiFi
[1162] IP: 192.168.4.111
[1162]

/ _ ) / _ \ _ / / _ \
/ _ / / / / _ \ \ _ \
/ _ / / \ _ / _ / / \ _ \
/ _ / v0.6.1 on ESP32

[1168] Connecting to 192.168.4.100
[1382] Ready (ping: 8ms).
```



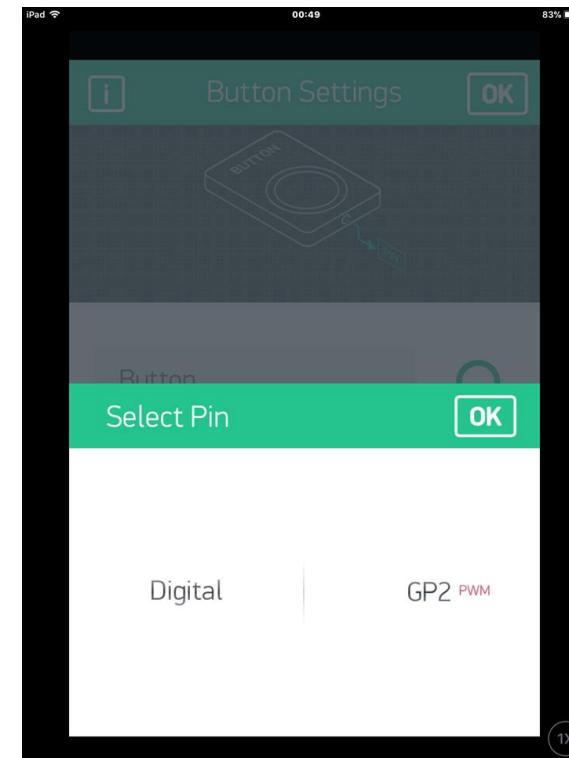
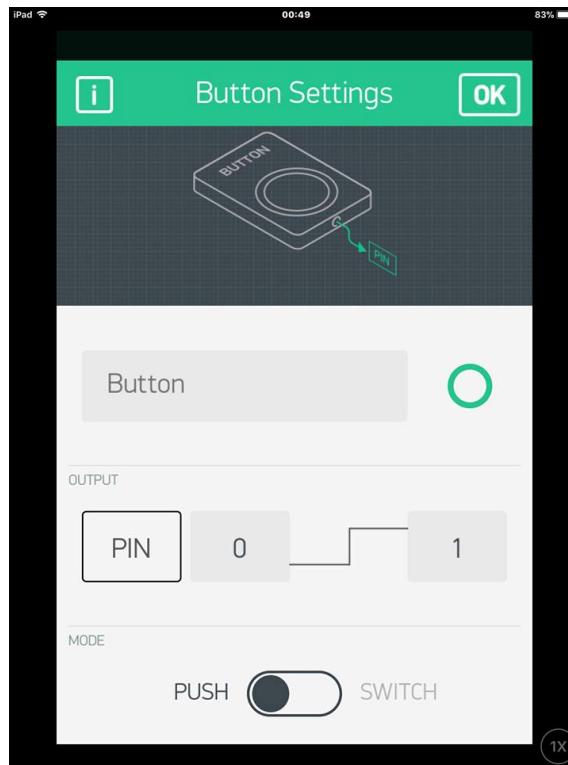
+Add Button



คลิก BUTTON

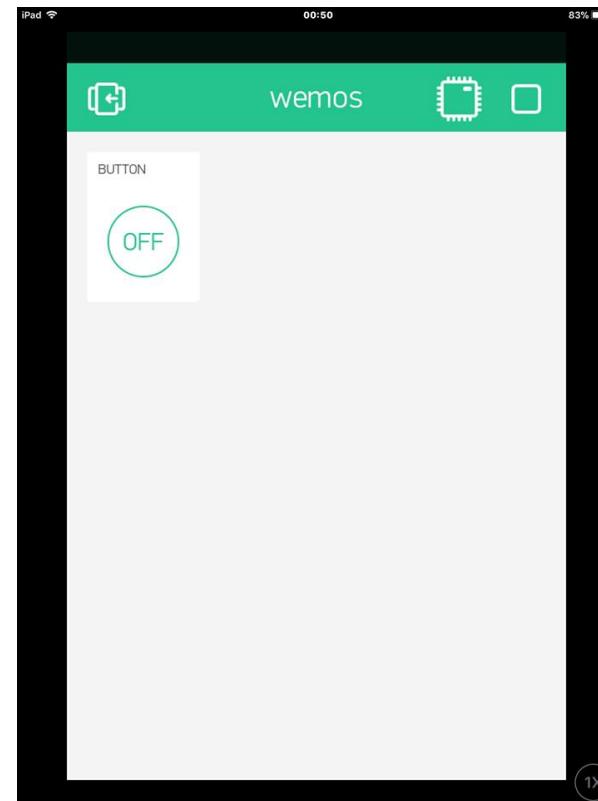
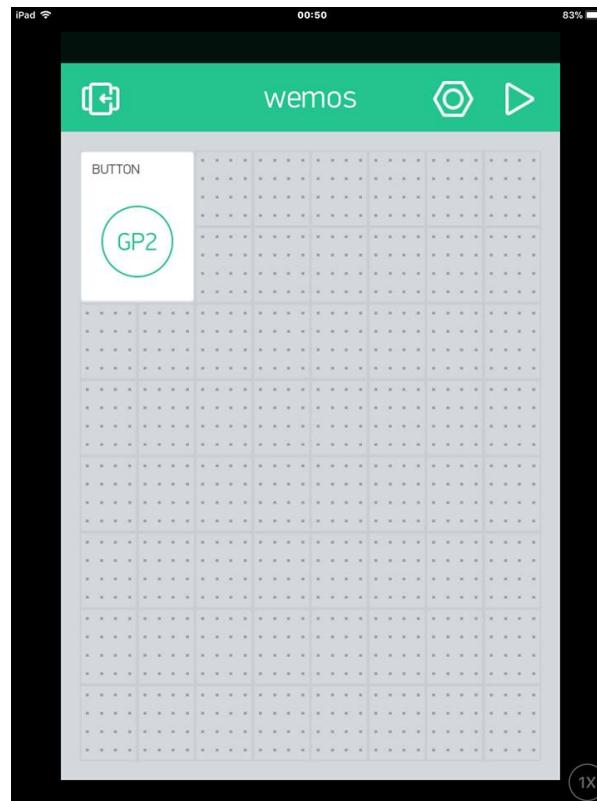


คลิก PIN เลือกเป็น Digital GP2





คลิกปุ่ม สามเหลี่ยม เพื่อรัน



เมื่อกดปุ่ม ไฟจะดับ เมื่อปล่อยปุ่ม ไฟจะติด



ສ່ວນ ຂັ້ນຕອນປ່ວມໂຄດ

1. ເປົ້າ include

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

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

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

2. ເປົ້າຄໍາ auth, ssid, pass

```
char auth[] = "YOUR AUTH";
```

```
char ssid[] = "lamloeiWIFI";
```

```
char pass[] = "123456789";
```

3. ເປົ້າ Blynk begin

```
Blynk.begin(auth, ssid, pass, IPAddress(192,168,4,101), 8080);
```



แบบฝึกหัด

- ให้ใส่ PIN ข้ามรีล
- เปลี่ยนปุ่มจาก PUSH เป็น SWITCH



Virtual Pins

- Blynk can control Digital and Analog I/O Pins on your hardware directly. You don't even need to write code for it. It's great for blinking LEDs, but often it's just not enough...
- We designed Virtual Pins to send **any** data from your microcontroller to the Blynk App and back.
- V0 – V127 สำหรับ นำเข้า หรือ นำออก ข้อมูล



File > Examples > Blynx > Widgets > LED > LED_Blink

The screenshot shows the Arduino IDE interface with the sketch `wemos_LED_Blink` open. The code is as follows:

```
File Edit Sketch Tools Help
wemos_LED_Blink | Ardu
30
31 #include <ESP8266WiFi.h>
32 #include <BlynkSimpleEsp8266.h>
33
34 // You should get Auth Token in the Blynk App.
35 // Go to the Project Settings (nut icon).
36 char auth[] = "72f96cd69d3f42f0bb8ff8efd4cff555";
37 char ssid[] = "lamloeiWIFI";
38 char pass[] = "123456789";
39
40 WidgetLED led1(V1);
41 BlynkTimer timer;
42 // V1 LED Widget is blinking
43 void blinkLedWidget()
44 {
45   if (led1.getValue()) {
46     led1.off();
47     Serial.println("LED on V1: off");
48   } else {
49     led1.on();
50     Serial.println("LED on V1: on");
51   }
52 }
53 void setup()
54 {
55   // Debug console
56   Serial.begin(9600);
57   Blynk.begin(auth, ssid, pass, IPAddress(192,168,4,101), 8080);
58 }
```

The serial monitor window shows the following output:

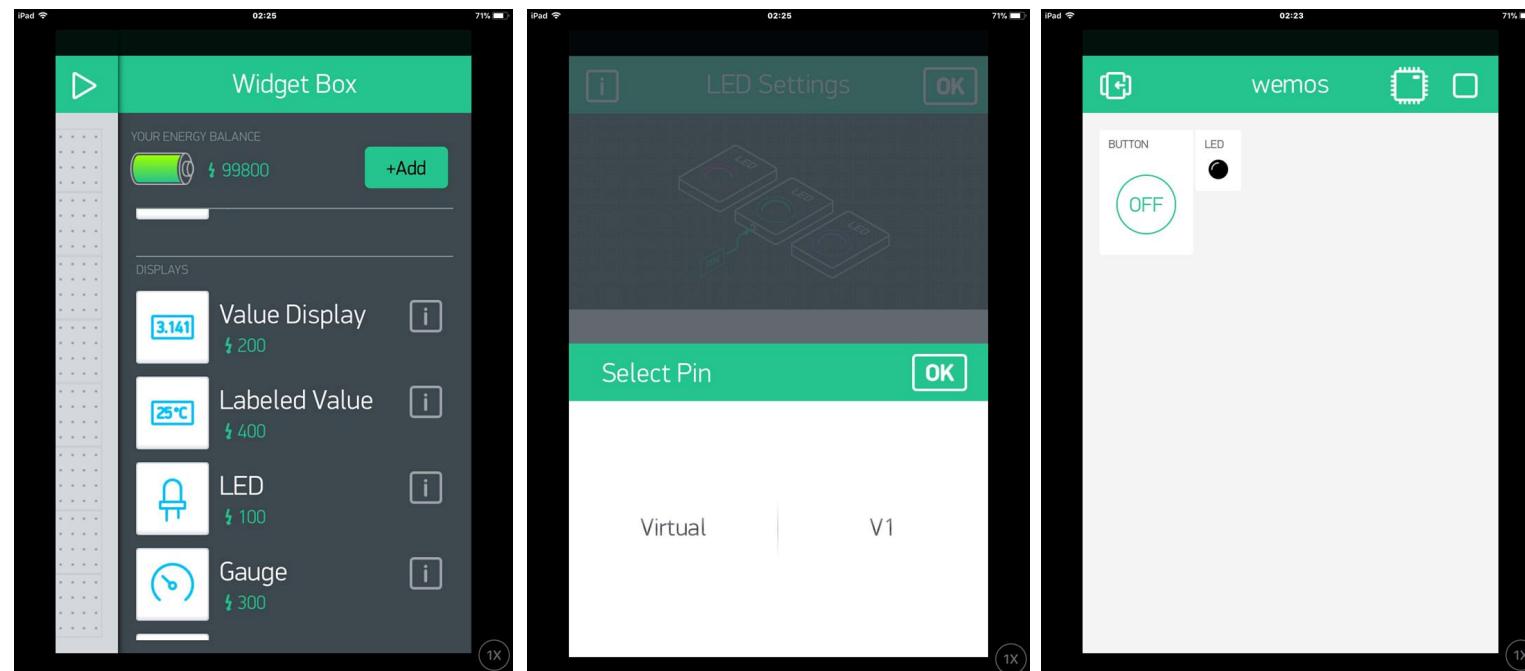
```
|SHPFt$#h$##xB##[61] Connecting to lamloeiWIFI
[2565] Connected to WiFi
[2565] IP: 192.168.4.110
[2565]
/ _ )/ / _ \ _ / / _ \
/ _ / / / / _ \ \ ' /
/ _ \ / \ _ , / _ / / _ \ \
/ _ / v0.5.1 on Arduino

[2636] Connecting to 192.168.4.101
[2791] Ready (ping: 22ms).
LED on V1: on
LED on V1: off
```

Autoscroll

Done uploading.

LED Blink



ຈະເໜີ LED ກວະພົບ



File > Examples > Blynk > More > Sync > ButtonPoll

wemos_ButtonPoll

```

File Edit Sketch Tools Help
wemos_ButtonPoll
31 #include <ESP8266WiFi.h>
32 #include <BlynkSimpleEsp8266.h>
33
34 // You should get Auth Token in the Blynk App.
35 // Go to the Project Settings (nut icon).
36 char auth[] = "72f96cd69d3f42f0bb8ff8efd4cff555";
37 char ssid[] = "lamloeiWIFI";
38 char pass[] = "123456789";
39
40 int prevState = -1;
41 int currState = -1;
42 long lastChangeTime = 0;
43
44 void checkPin()
45 {
46     // Invert state, since button is "Active LOW"
47     int state = !digitalRead(2);
48
49     // Debounce mechanism
50     long t = millis();
51     if (state != prevState) {
52         prevState = state;
53         lastChangeTime = t;
54     }
55     if (t - lastChangeTime > 50) {
56         if (state != currState) {
57             currState = state;
58             Blynk.virtualWrite(V1, state);
59         }
}

```

ปรับ BUTTON เป็น PIN V1

เมื่อกดสวิตซ์ low ที่ขา 2 จะเห็นไฟแสดงที่ปุ่ม



File > Examples > Blynx > GettingStarted > GetData

A screenshot of the Arduino IDE. The top bar shows the title "wemos_GetData | Arduino 1". The left pane displays the Arduino sketch code. The right pane shows the Serial Monitor output.

The code in the Arduino sketch is as follows:

```
File Edit Sketch Tools Help
File Edit Sketch Tools Help
wemos_GetData
31
32 #include <ESP8266WiFi.h>
33 #include <BlynkSimpleEsp8266.h>
34
35 // You should get Auth Token in the Blynk App.
36 // Go to the Project Settings (nut icon).
37 char auth[] = "72f96cd69d3f42f0bb8ff8efd4cff555";
38 char ssid[] = "lamloeIWIFI";
39 char pass[] = "123456789";
40
41 // This function will be called every time Slider Wi
42 // in Blynk app writes values to the Virtual Pin 1
43 BLYNK_WRITE(V1)
44 {
45     int pinValue = param.asInt(); // assigning incomin
46     // You can also use:
47     // String i = param.asStr();
48     // double d = param.asDouble();
49     Serial.print("V1 Slider value is: ");
50     Serial.println(pinValue);
51 }
52
53 void setup()
54 {
55     // Debug console
56     Serial.begin(9600);
57
58     Blynk.begin(auth, ssid, pass, IPAddress(192,168,4,101), 8080);
59 }
```

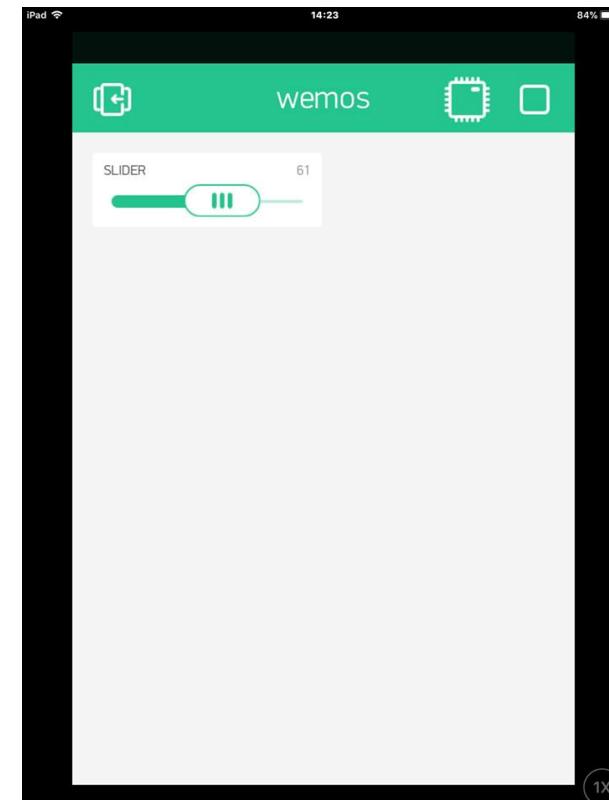
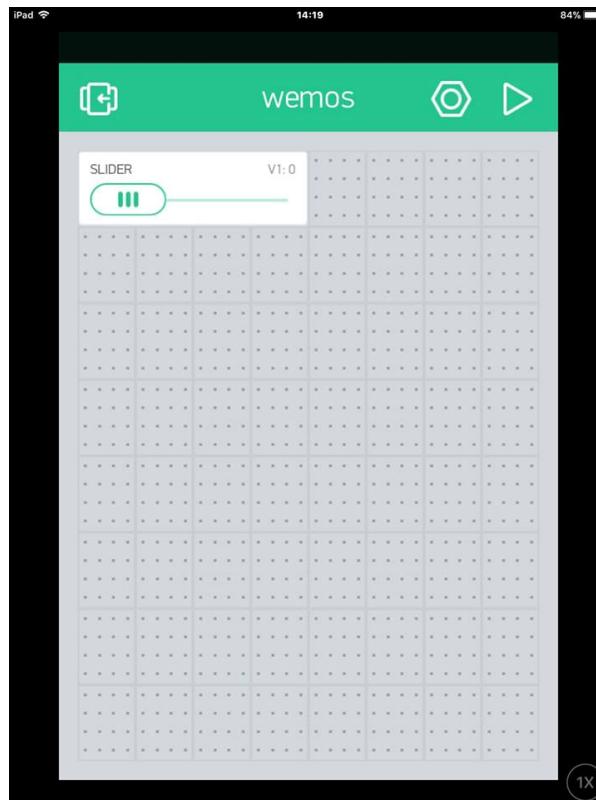
The Serial Monitor output is as follows:

```
|  
SH1|G9B$L$@xtH$|[61] Connecting to lamloeIWIFI  
[564] Connected to WiFi  
[565] IP: 192.168.4.110  
[565]  
/ _ ) / _ \ _ / / _ / _ / / _ / _ / / _ / _ / _ / v0.5.1 on Arduino  
[632] Connecting to 192.168.4.101  
[730] Ready (ping: 14ms).  
V1 Slider value is: 61
```

Autoscroll



เพิ่ม Widget Slider ที่ขา V1





สรุป Virtual Pin

- นำเข้า

led

```
WidgetLED led1(V1); led1.on(); led1.off();
```

Button และอื่นๆ

```
Blynk.virtualWrite(V1, state);
```

- นำออก

```
BLYNK_WRITE(V1)
```

```
{
```

```
    int pinValue = param.asInt();
```

```
}
```

The screenshot shows the Arduino IDE interface with the following details:

File > Examples > Blynk > GettingStarted > VirtualPinReply

Code Editor (Left):

```
wemos_VirtualPinReply
32 #include <ESP8266WiFi.h>
33 #include <BlynkSimpleEsp8266.h>
34
35 // You should get Auth Token in the Blynk App.
36 // Go to the Project Settings (nut icon).
37 char auth[] = "72f96cd69d3f42f0bb8ff8efd4cff555";
38 char ssid[] = "lamloeiWIFI";
39 char pass[] = "123456789";
40
41 // This function is called when there is a Widget
42 // which is requesting data from Virtual Pin (5)
43 BLYNK_READ(V5)
44 {
45     // This command writes Arduino's uptime in seconds to Virtual Pin 5
46     Blynk.virtualWrite(V5, millis() / 1000);
47 }
48
49 void setup()
50 {
51     // Debug console
52     Serial.begin(9600);
53
54     Blynk.begin(auth, ssid, pass, IPAddress(192,168,4,101), 8080);
55 }
```

Serial Monitor (Right):

```
[6265] Connecting to lamloeiWIFI
[6769] Connected to WiFi
[6769] IP: 192.168.4.110
[6769]

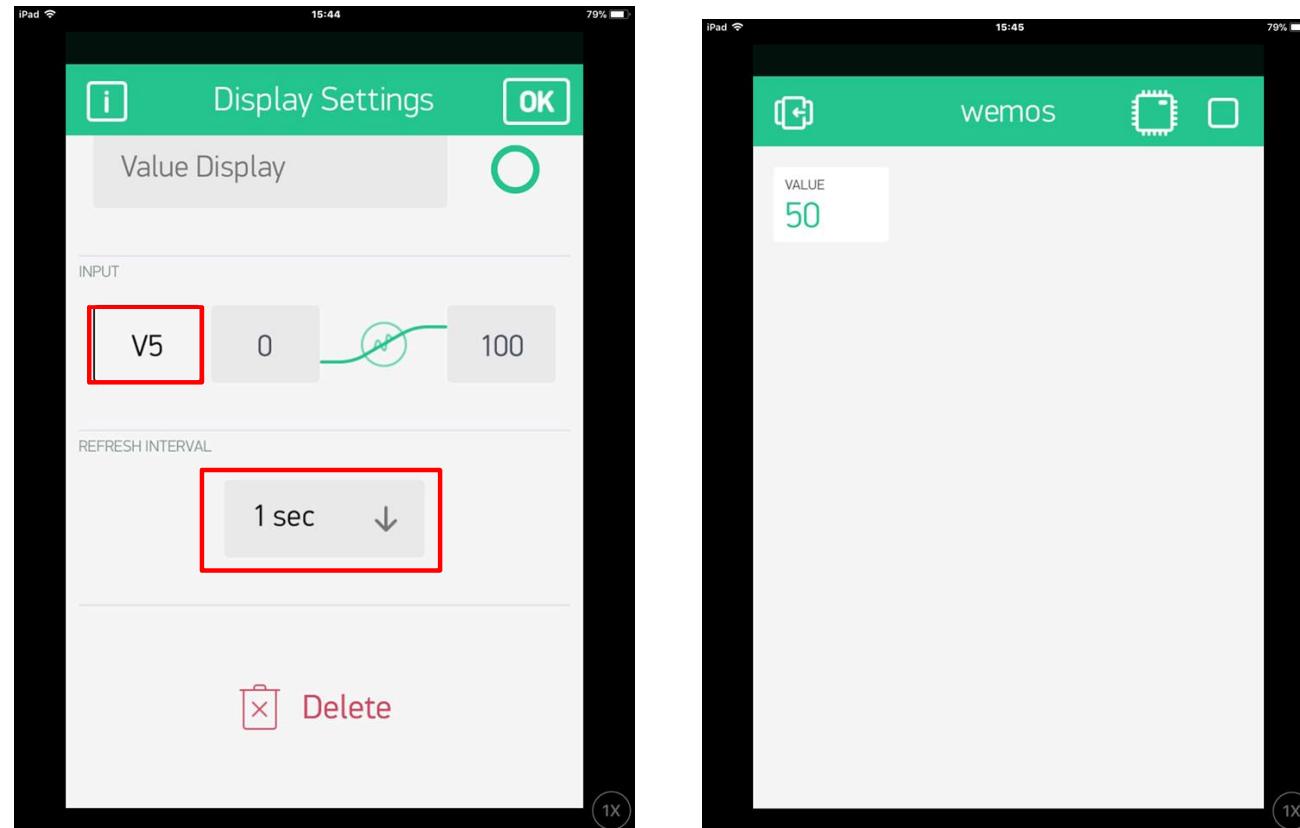
/ _ ) / _ \ _ / _ \
/ _ / / / / _ \ \ ' _ \
/ _ /_ \ _ , / _ / _ \ _ \
/ _ v0.5.1 on Arduino

[6840] Connecting to 192.168.4.101
[6936] Ready (ping: 12ms).
```

Autoscroll:



Widget Value Display





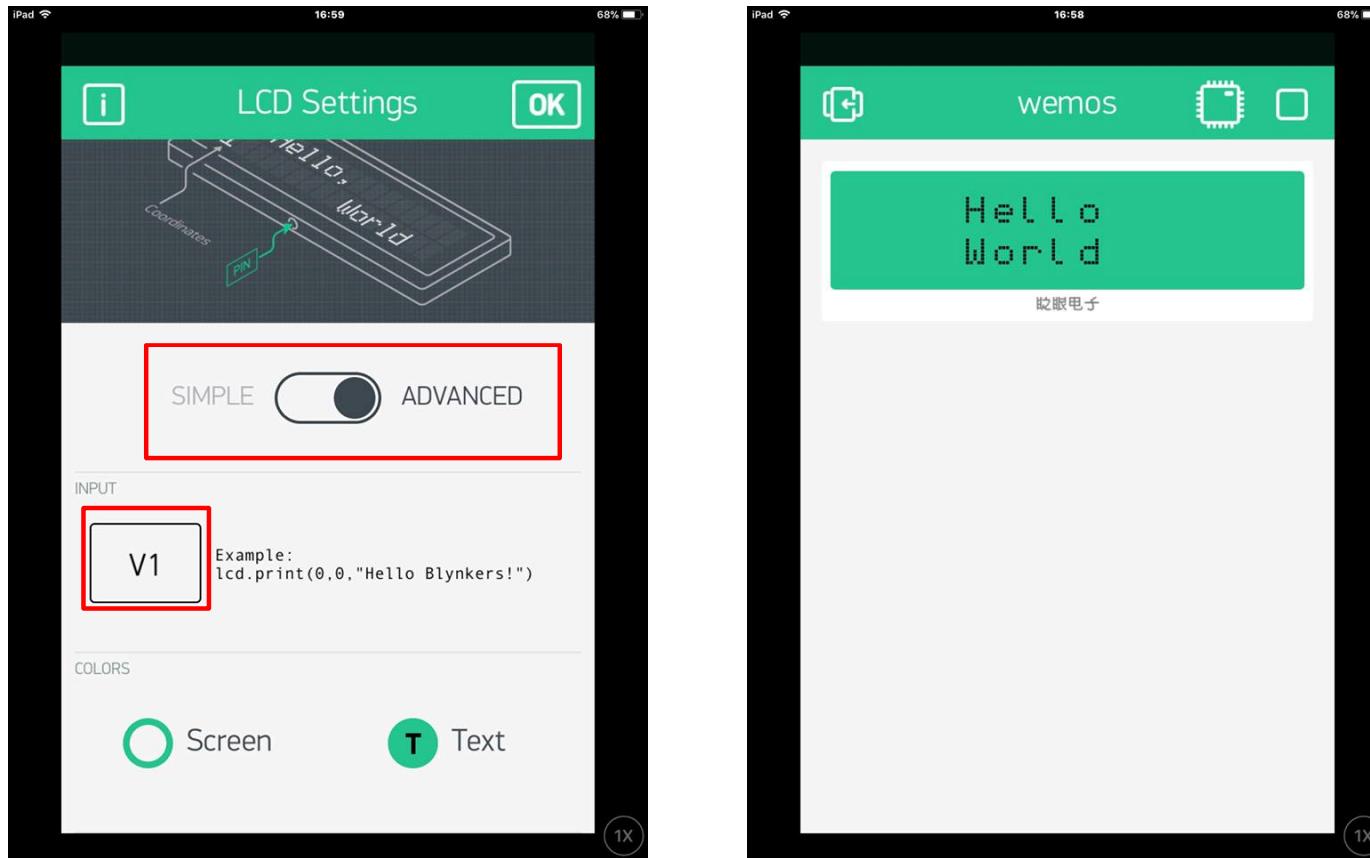
File > Examples > Blynx > Widgets > LCD > LCD_AdvancedMode

The screenshot shows the Arduino IDE interface with the sketch `wemos_LCD_AdvancedMode` open. The code implements a Blynk WidgetLCD to display "Hello" and "World" on an LCD screen. It includes Blynk library setup and prints messages to the LCD at positions (4, 0) and (4, 1).

```
30
31 #include <ESP8266WiFi.h>
32 #include <BlynkSimpleEsp8266.h>
33
34 // You should get Auth Token in the Blynk App.
35 // Go to the Project Settings (nut icon).
36 char auth[] = "72f96cd69d3f42f0bb8ff8efd4cff555";
37 char ssid[] = "lamloeiWIFI";
38 char pass[] = "123456789";
39
40 WidgetLCD lcd(V1);
41
42 void setup()
43 {
44     // Debug console
45     Serial.begin(9600);
46
47     Blynk.begin(auth, ssid, pass, IPAddress(192,168,4,101), 8080);
48
49     lcd.clear(); //Use it to clear the LCD Widget
50     lcd.print(4, 0, "Hello"); // use: (position X: 0-15, position Y: 0-1, "Message you want to print")
51     lcd.print(4, 1, "World");
52     // Please use timed events when LCD printintg in void loop to avoid sending too many commands
53     // It will cause a FLOOD Error, and connection will be dropped
54 }
```



Widget LCD





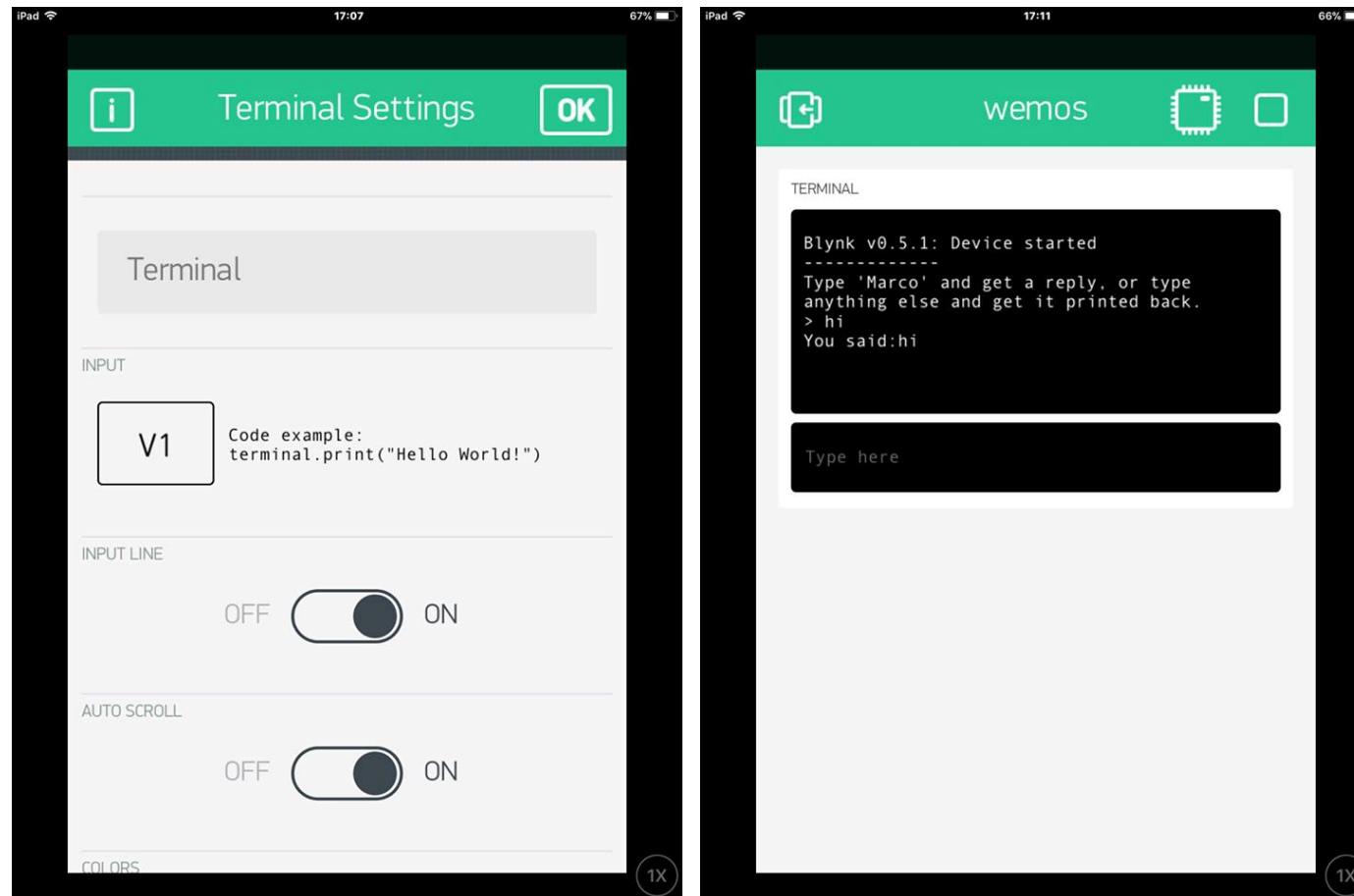
File > Examples > Blynx > Widgets > Terminal

The screenshot shows the Arduino IDE interface with the title bar "wemos_Terminal". The code editor displays the "wemos_Terminal" sketch. A red box highlights the following code block:

```
31 #include <ESP8266WiFi.h>
32 #include <BlynkSimpleEsp8266.h>
33
34 // You should get Auth Token in the Blynk App.
35 // Go to the Project Settings (nut icon).
36 char auth[] = "72f96cd69d3f42f0bb8ff8efd4cff555";
37 char ssid[] = "lamloeiWIFI";
38 char pass[] = "123456789";
39
40 // Attach virtual serial terminal to Virtual Pin V1
41 WidgetTerminal terminal(V1);
42
43 // You can send commands from Terminal to your hardware. Just use
44 // the same Virtual Pin as your Terminal Widget
45 BLYNK_WRITE(V1)
46 {
47
48     // if you type "Marco" into Terminal Widget - it will respond: "Polo:"
49     if (String("Marco") == param.asStr()) {
50         terminal.println("You said: 'Marco'");
51         terminal.println("I said: 'Polo'");
52     } else {
53
54         // Send it back
55         terminal.print("You said:");
56         terminal.write(param.getBuffer(), param.getLength());
57         terminal.println();
58     }
59 }
```



Widget Terminal





File > Examples > Blynx > Widget > Timer

The screenshot shows the Arduino IDE interface with the sketch `wemos_Timer` open. The sketch code includes configurations for WiFi and Blynk, and a timer function that prints values to the serial port. The Serial Monitor window shows the connection process and the timer values 17.20 and 17.21.

```
#include <ESP8266WiFi.h>
#include <BlynkSimpleEsp8266.h>

// You should get Auth Token in the Blynk App.
// Go to the Project Settings (nut icon).
char auth[] = "72f96cd69d3f42f0bb8ff8erfd4cifi555";
char ssid[] = "lamloeiWIFI";
char pass[] = "123456789";

BLYNK_WRITE(V5)
{
    // You'll get HIGH/1 at startTime and LOW/0 at stopTime.
    // this method will be triggered every day
    // until you remove widget or stop project or
    // clean stop/start fields of widget
    Serial.print("Got a value: ");
    Serial.println(param.asStr());
}

void setup()
{
    // Debug console
    Serial.begin(9600);
}

Blynk.begin(auth, ssid, pass, IPAddress(192,168,4,101), 8080);
```

Serial Monitor output:

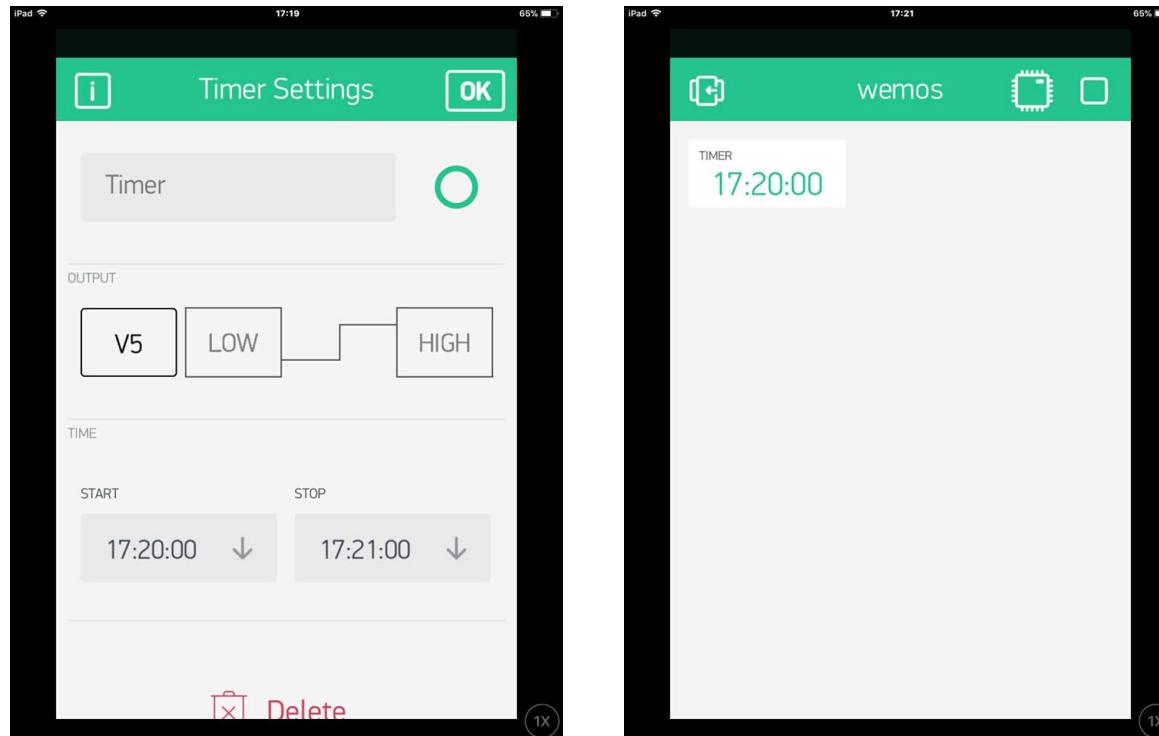
```
[6333] Connecting to lamloeiWIFI
[6837] Connected to WiFi
[6837] IP: 192.168.4.110
[6837]

/ _ ) / _ \ _ / _ \
/ _ / / / / _ \ ' _ \
/ _ / _ \ , / _ / _ \ _ \
/ _ / v0.5.1 on Arduino

[6907] Connecting to 192.168.4.101
[7021] Ready (pin 17.20
Got a value: 1
Got a value: 0
17.21
```



Widget Timer



เมื่อเวลา 17:20 จะได้ค่า 1

เมื่อเวลา 17:21 จะได้ค่า 0



File > Examples > Blynx > Widget > WebHook > WebHook_GET

wemos_WebHook_GET | Arduino 1.8.5

File Edit Sketch Tools Help

wemos_WebHook_GET

```

28 #define BLYNK_PRINT Serial
29 // Allow for receiving messages up to 512 bytes long
30 // #define BLYNK_MAX_READBYTES 512
31
32 #include <ESP8266WiFi.h>
33 #include <BlynkSimpleEsp8266.h>
34
35 // You should get Auth Token in the Blynk App.
36 // Go to the Project Settings (nut icon).
37 char auth[] = "72f96cd69d3f42f0bb8ff8efd4cff555";
38 char ssid[] = "lamloeiWIFI";
39 char pass[] = "123456789";
40
41 BLYNK_WRITE(V0)
42 {
43     Serial.println("WebHook data:");
44     Serial.println(param.asStr());
45 }
46
47 void setup()
48 {
49     // Debug console
50     Serial.begin(9600);
51
52     Blynk.begin(auth, ssid, pass, IPAddress(192,168,4,101), 8080);
53
54     Blynk.virtualWrite(V0, "https://raw.githubusercontent.com/blynkkk/blynk-library/master/extras/logo.txt");
55 }
```

COM28

[6285] Connecting to lamloeiWIFI
[6789] Connected to WiFi
[6789] IP: 192.168.4.110
[6789]

/ _) / _ _ _ _ / _ /
/ _ / / / / _ \ / ' /
/ __/ / \ \ , / / / / \ \ \ /
/ __/ v0.5.1 on Arduino

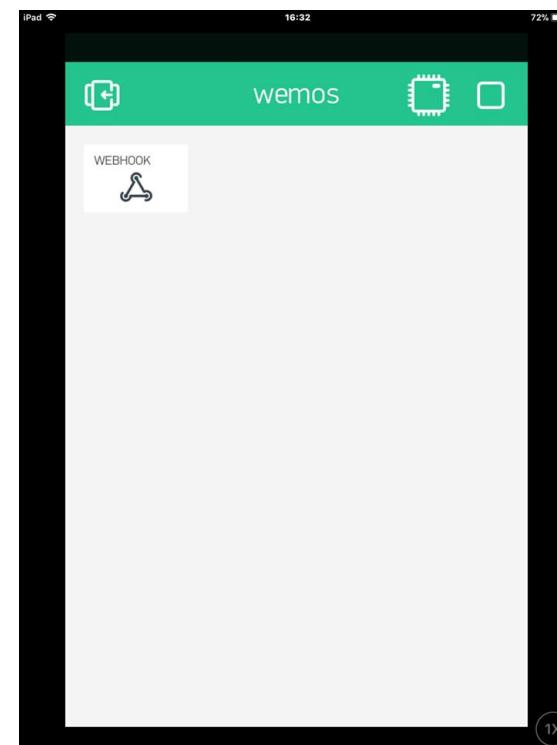
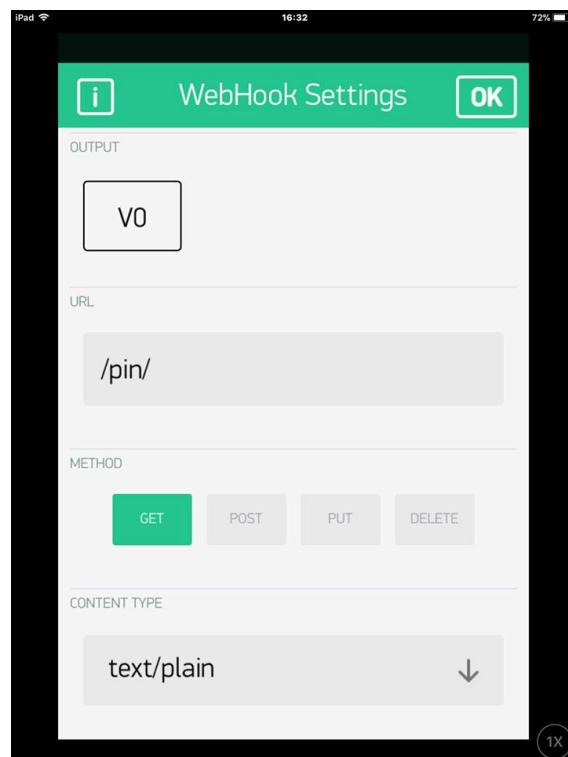
[6860] Connecting to 192.168.4.101
[6993] Ready (ping: 19ms).
WebHook data:

/ _) / _ _ _ _ / _ /
/ _ / / / / _ \ / ' /
/ __/ / \ \ , / / / / \ \ \ /
/ __/

Autoscroll



Widget WebHook





File > Examples > Blynx > Widgets > Menu

The image shows the Arduino IDE interface with the sketch `wemos_Menu` open. The code is as follows:

```
File Edit Sketch Tools Help
wemos_Menu
wemos_Menu | Arduino 1.8.5

30
31 #include <ESP8266WiFi.h>
32 #include <BlynkSimpleEsp8266.h>
33
34 // You should get Auth Token in the Blynk App.
35 // Go to the Project Settings (nut icon).
36 char auth[] = "72f96cd69d3f42f0bb8ff8efd4cff555";
37 char ssid[] = "lamloeiWIFI";
38 char pass[] = "123456789";
39
40 BLYNK_WRITE(V1) {
41   switch (param.asInt()) {
42     {
43       case 1: // Item 1
44         Serial.println("Item 1 selected");
45         break;
46       case 2: // Item 2
47         Serial.println("Item 2 selected");
48         break;
49       case 3: // Item 3
50         Serial.println("Item 3 selected");
51         break;
52       default:
53         Serial.println("Unknown item selected");
54     }
55 }
```

The serial monitor window on the right shows the following output:

```
[6230] Connecting to lamloeiWIFI
[6733] Connected to WiFi
[6733] IP: 192.168.4.110
[6733]

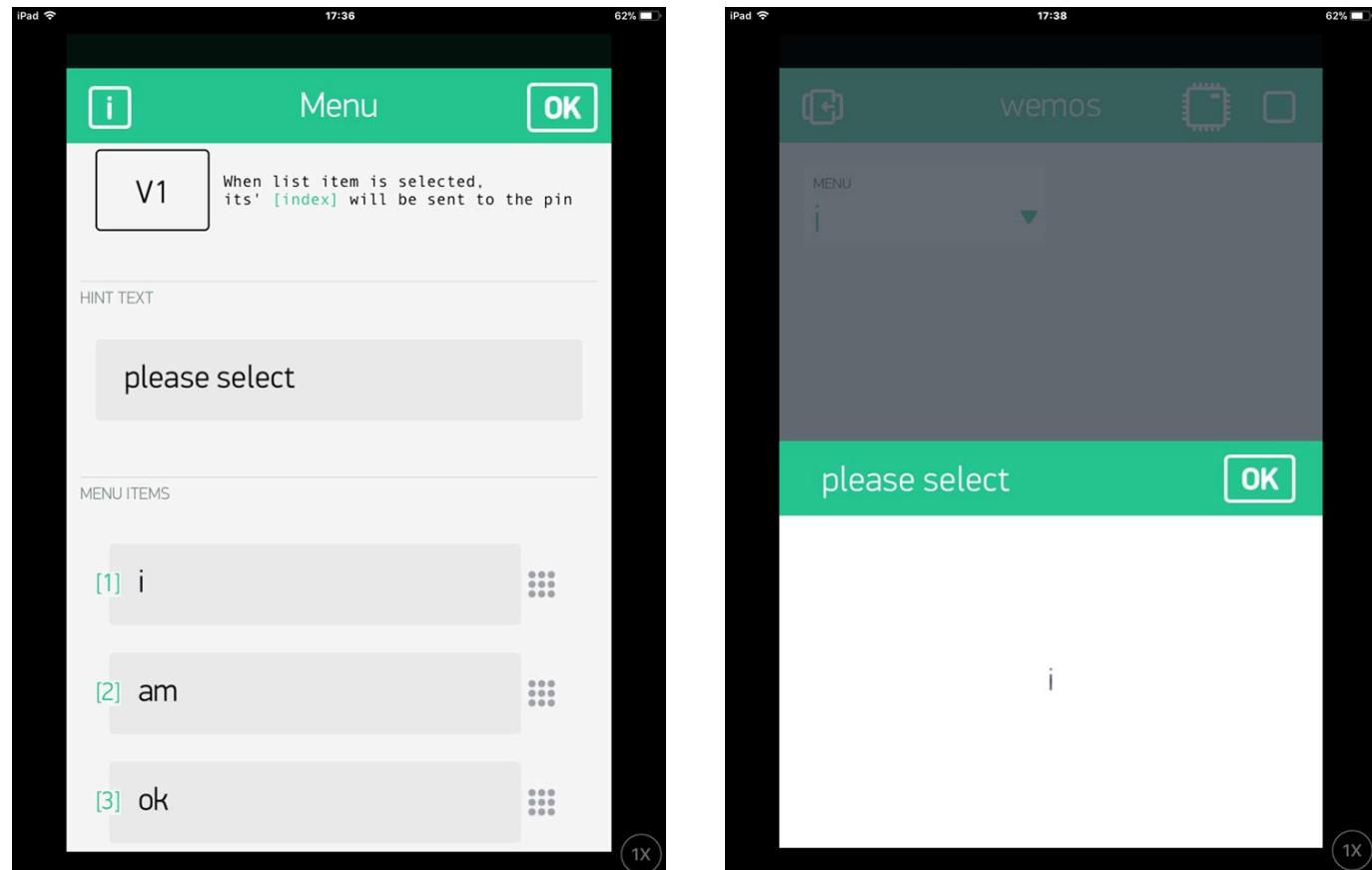
/ _ ) / / _ \ _ / / _ \
/ _ / / / / / _ \ \ _ \
/ _ / / \ _ , / / / / \ _ \
/ _ / v0.5.1 on Arduino

[6804] Connecting to 192.168.4.101
[6973] Ready (ping: 15ms).
Item 1 selected
```

Autoscroll



Widget Menu



The screenshot shows the GitHub repository page for `PaulStoffregen/Time`. The repository URL is <https://github.com/PaulStoffregen/Time>. The page includes a navigation bar with links for This repository, Search, Pull requests, Issues, Marketplace, and Explore. It also features a notification bell, a '+' button, and a user profile icon. Below the navigation bar, there are buttons for Watch (72), Star (466), Fork (260), and Insights. The main content area displays the repository's name, `PaulStoffregen / Time`, and a brief description: "Time library for Arduino <http://playground.arduino.cc/code/time>". A summary bar shows 47 commits, 1 branch, 2 releases, and 11 contributors. Below this, a list of recent commits is shown:

Commit	Description	Date
	Add issue template	Latest commit a8f9be7 3 days ago
	Add issue template	3 days ago
	Merge pull request #50 from SukkoPera/master	3 months ago
	Use TimeLib.h header internally too	2 years ago
	corrected minor typos in readme.md	11 months ago
	Update Time.cpp	2 months ago
	Fix for includes with Arduino 1.6.6	2 years ago

At the bottom of the repository page, the text "Clone Time & Arduino libraries" is displayed.



File > Examples > Blynx > Widgets > RTC

The image shows the Arduino IDE interface with the sketch `wemos_RTC` open. The code is for a Blynk RTC example. A red box highlights the header includes and a section of constants:

```
40
41 #include <ESP8266WiFi.h>
42 #include <BlynkSimpleEsp8266.h>
43 #include <TimeLib.h>
44 #include <WidgetRTC.h>
45
46 // You should get Auth Token in the Blynk App.
47 // Go to the Project Settings (nut icon).
48 char auth[] = "72f96cd69d3f42f0bb8ff8efd4cff555";
49 char ssid[] = "lamloeiWIFI";
50 char pass[] = "123456789";
51
52 BlynkTimer timer;
53
54 WidgetRTC rtc;
55
56 // Digital clock display of the time
57 void clockDisplay()
58 {
59     // You can call hour(), minute(), ... at any time
60     // Please see Time library examples for details
61
62     String currentTime = String(hour()) + ":" + minute() + ":" + second();
63     String currentDate = String(day()) + " " + month() + " " + year();
```

The Serial Monitor window on the right shows the output of the sketch. It connects to a WiFi network and then connects to a Blynk server, displaying the current time and date. The output is as follows:

```
[6351] Connecting to lamloeiWIFI
[6854] Connected to WiFi
[6855] IP: 192.168.4.110
[6855]

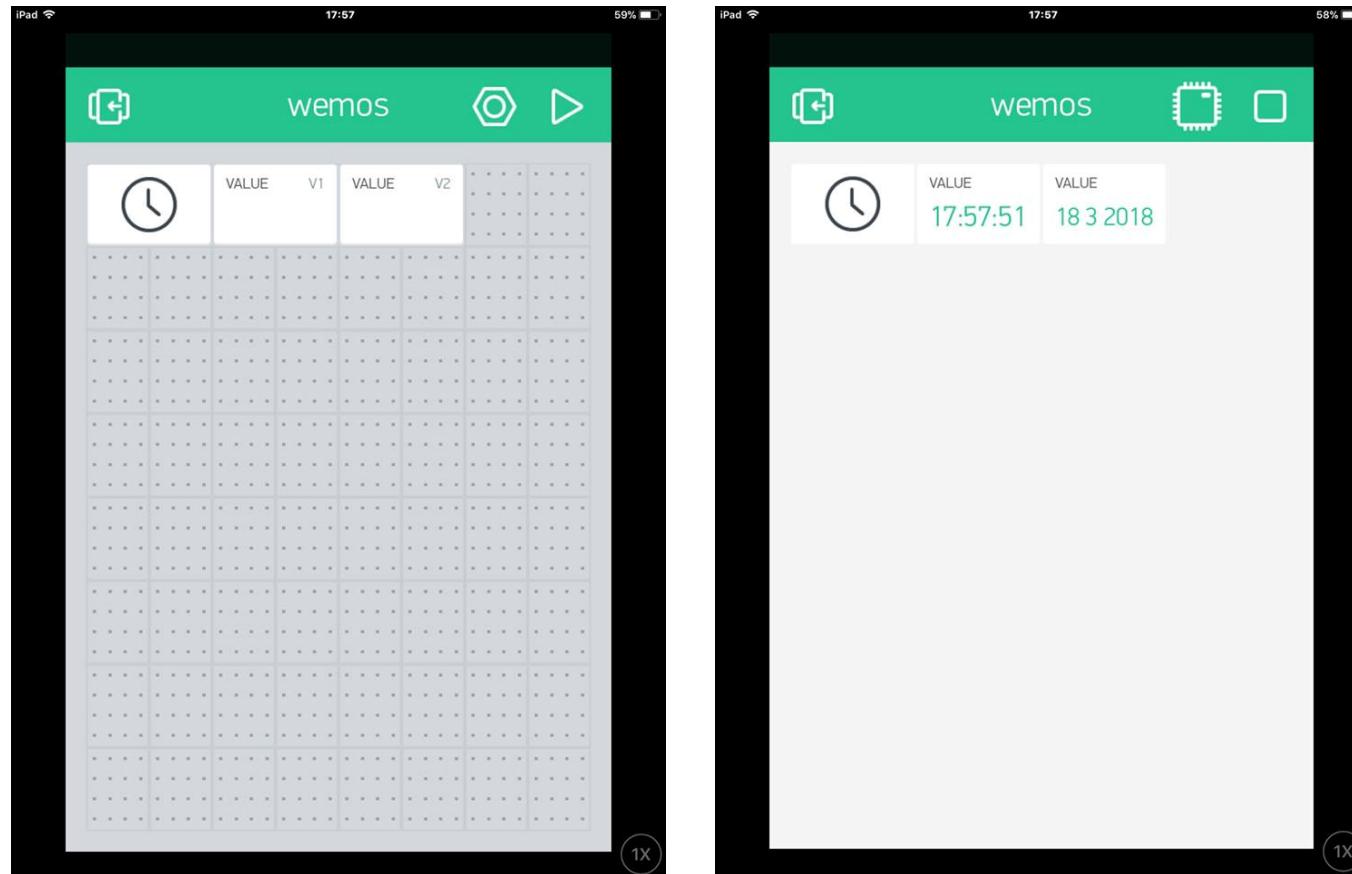
/ _ ) / _ _ _ _ / _ 
/ _ / / / / _ \ ' _ /
/ _ / / \ , / / / / \ \
/ __/ v0.5.1 on Arduino

[6925] Connecting to 192.168.4.101
[6986] Ready (ping: 15ms).
[7132] Time sync: OK
Current time: 17:57:51 18 3 2018
Current time: 17:58:1 18 3 2018
Current time: 17:58:11 18 3 2018
```

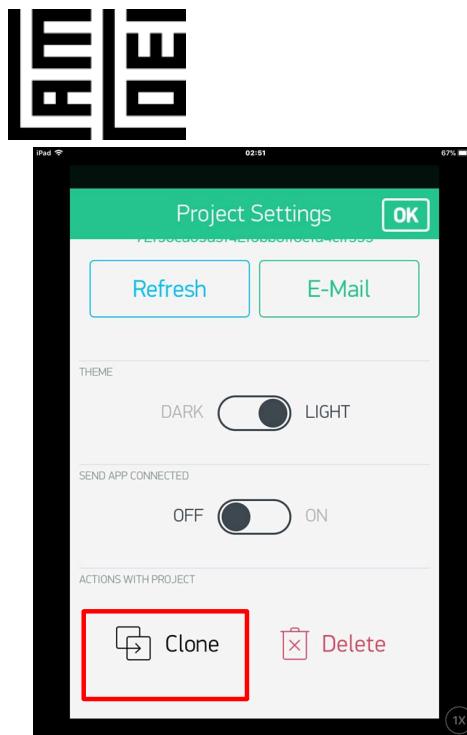
Autoscroll



Widget RTC



clone

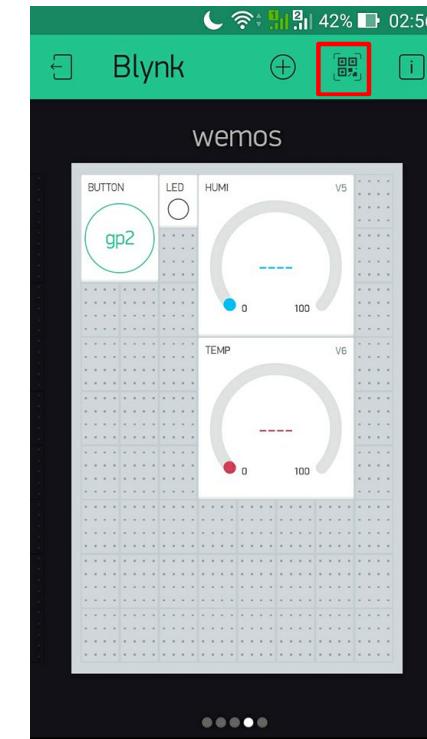
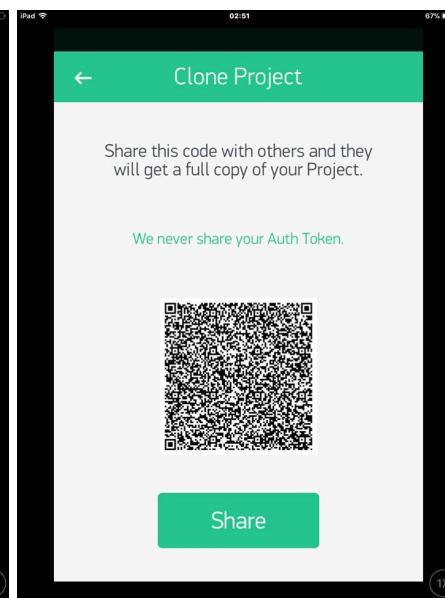


มือถือ 1

หากเหลือ Project Settings เลื่อนลงกด Clone

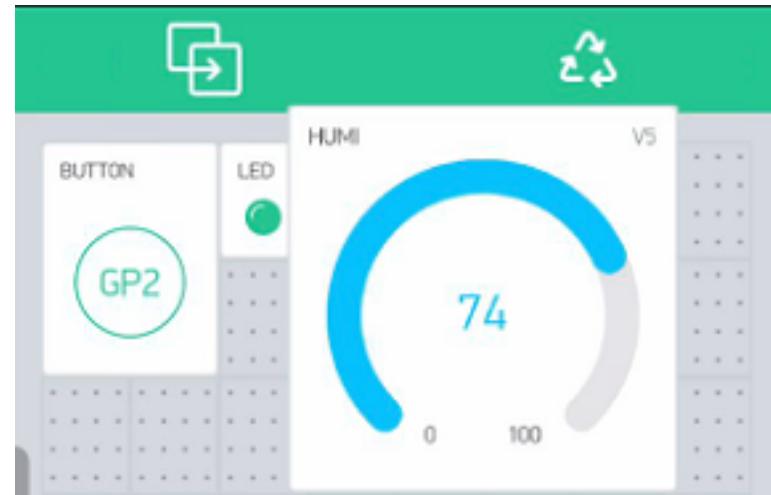
มือถือ 2

Log In และเข้าหน้า QR Code



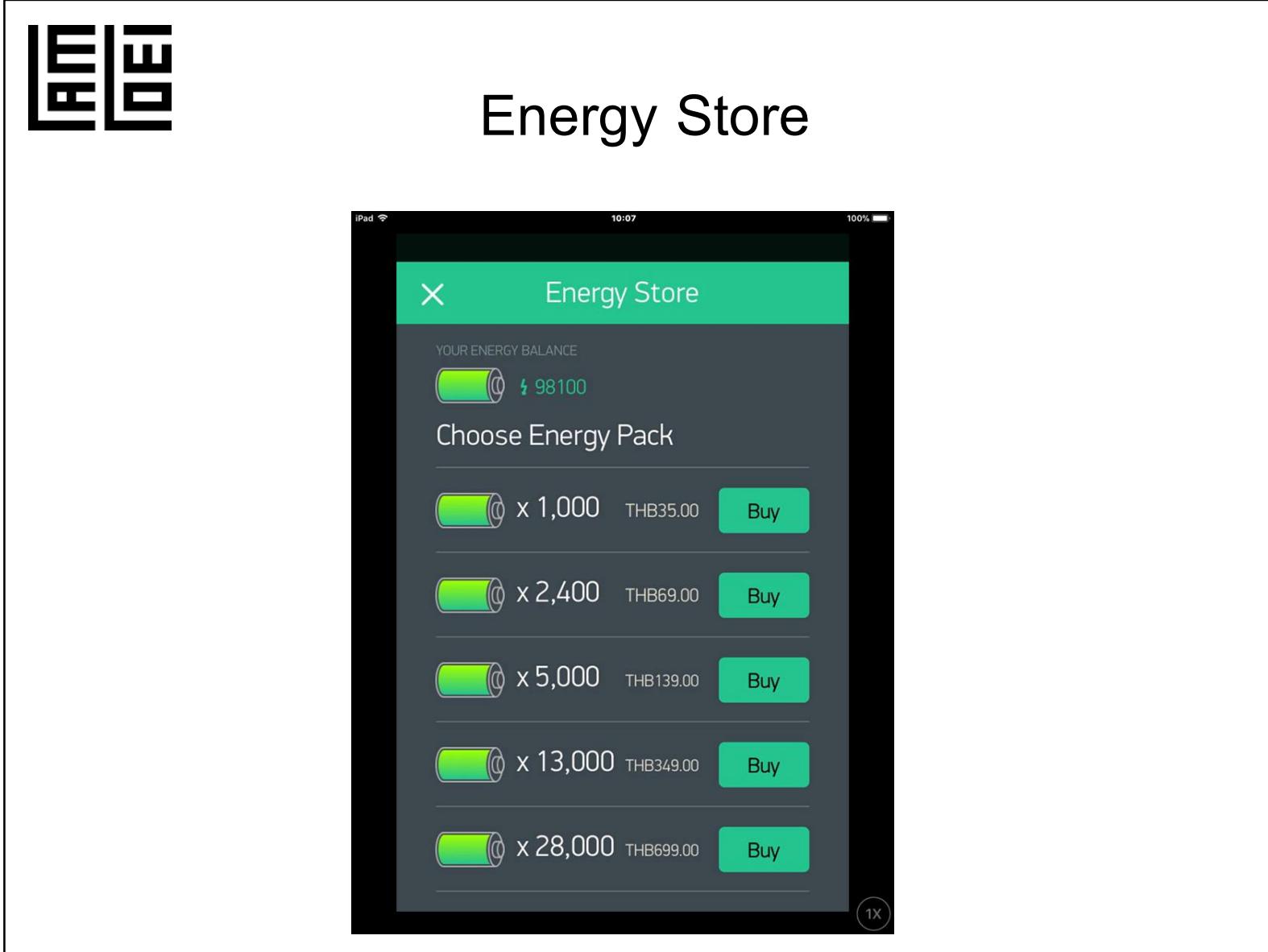


Copy Delete



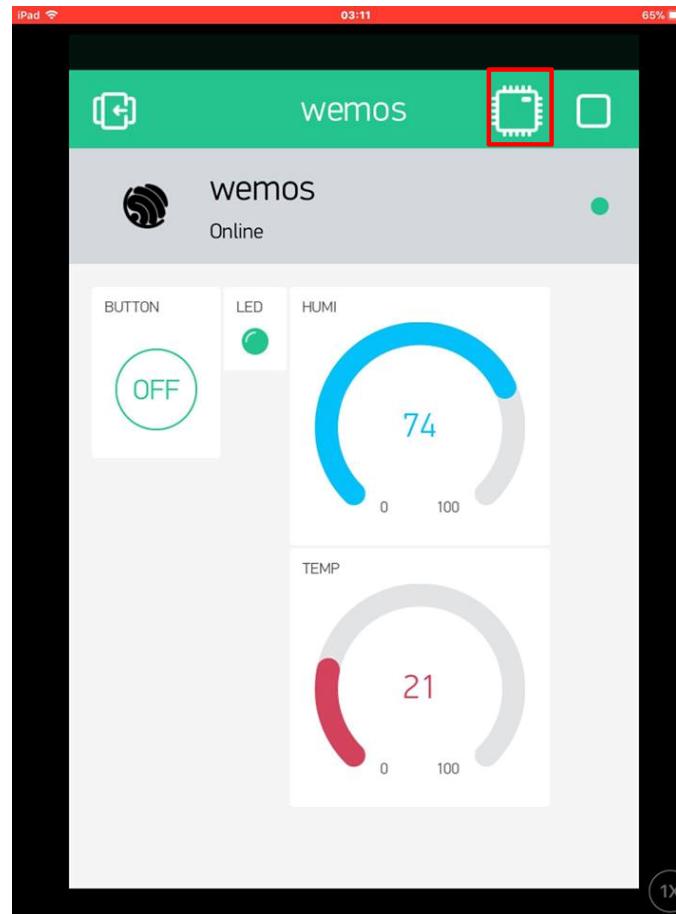
คลิก Widget ด้านไว้

นำ Widget ใน Copy ถ้าต้องคัดลอก หรือ Del ถ้าต้องการลบ





Check online





Widget

CONTROLLERS

CONTROLLERS		
	Button \$ 200	i
	Slider \$ 200	i
	Vertical Slider \$ 200	i
	Timer \$ 200	i
	Joystick \$ 400	i
	zeRGBa \$ 400	i
	Step H \$ 500	i
	Step V \$ 500	i

DISPLAYS

DISPLAYS		
	Value Display \$ 200	i
	Labeled Value \$ 400	i
	LED \$ 100	i
	Gauge \$ 300	i
	LCD \$ 400	i
	SuperChart \$ 900	i
	Terminal \$ 200	i
	Video Stream \$ 500	i
	Level H \$ 200	i
	Level V \$ 200	i

NOTIFICATIONS

NOTIFICATIONS		
	Twitter \$ 0	i
	Notification \$ 400	i
	Email \$ 100	i

Widget

DEVICE MANAGEMENT

DEVICE MANAGEMENT

- Device Selector ₩ 1900
- Device Tiles ₩ 4900

SMARTPHONE SENSORS

SIMPLY SMART

SMARTPHONE SENSORS

- GPS Stream ₩ 500
- Accelerometer ₩ 400

OTHER

OTHER

- Bridge ₩ 100
- Real-time clo... ₩ 100
- BLE (beta) ₩ 0
- Music Player ₩ 400
- WebHook ₩ 500

INTERFACE

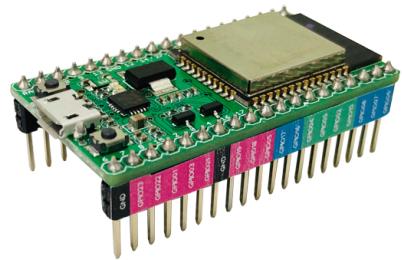
INTERFACE

- Tabs ₩ 0
- Menu ₩ 400
- Table ₩ 800
- Time input ₩ 200
- Map ₩ 600

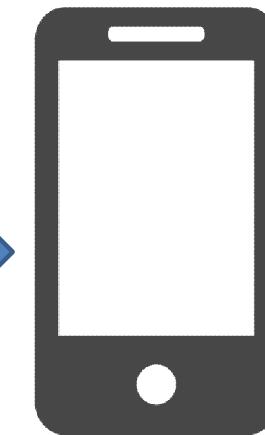


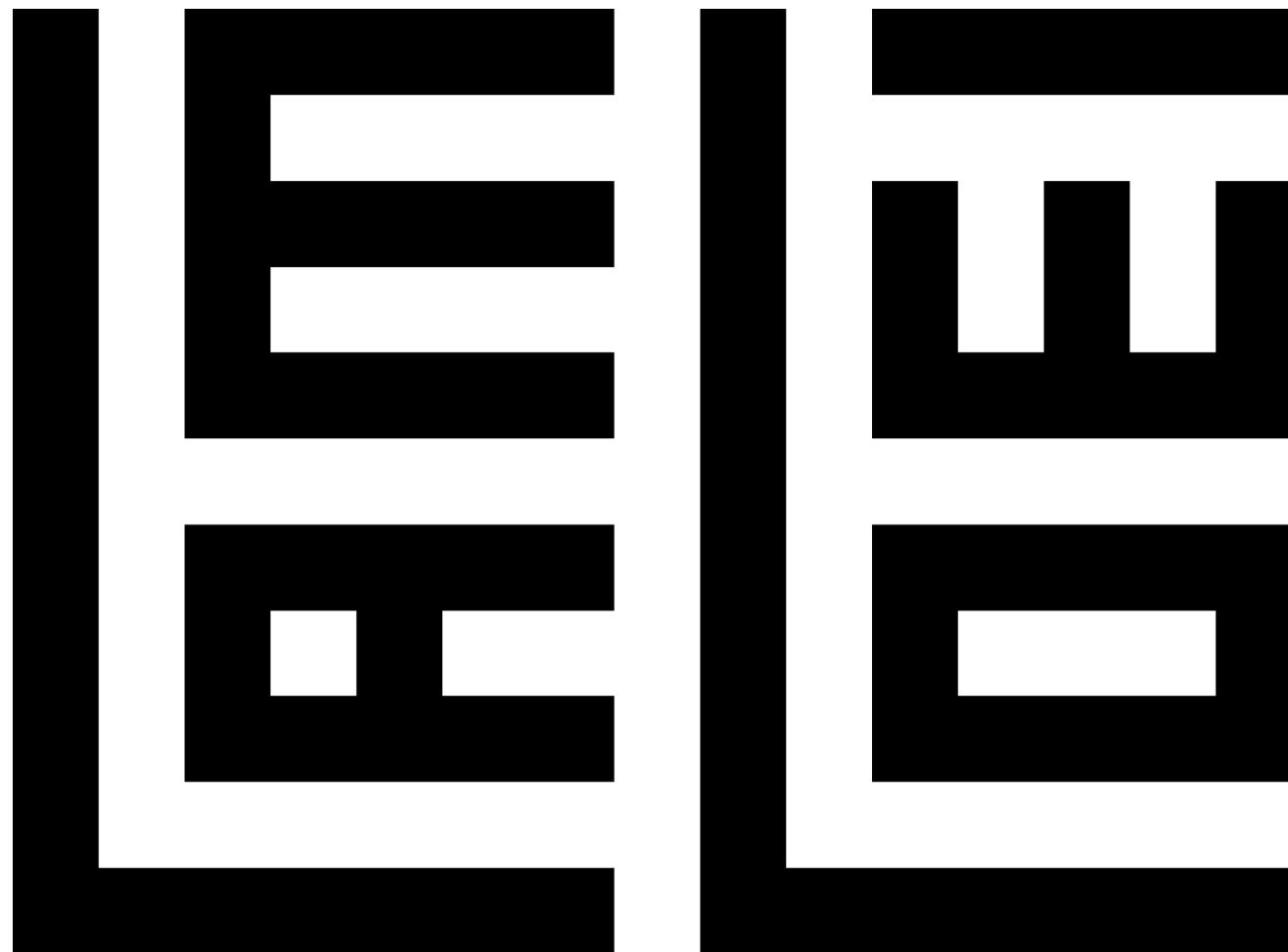
Project

- Project Blynk Node32Lite



Blynk





<https://www.facebook.com/lamloeicom>