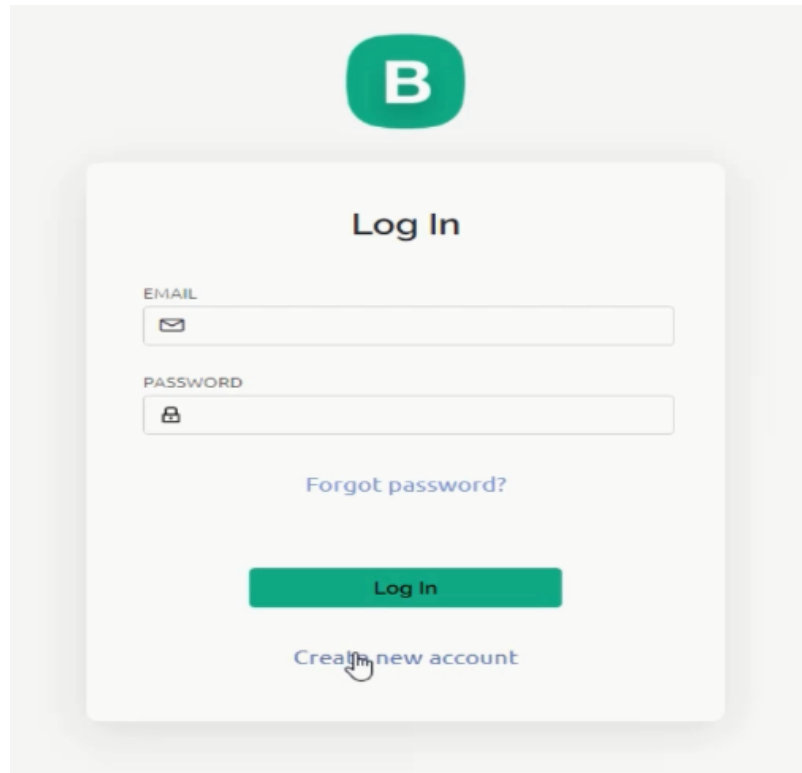



Blynk. Cloud Dashboard Setup:

Go to blynk.cloud and register a free account. For this click on the Create new account.

The image shows a login form for the Blynk Cloud Dashboard. At the top is a green circular logo with a white letter 'B'. Below the logo is a white rectangular box with a subtle shadow. Inside this box, the text 'Log In' is centered at the top. Below 'Log In' are two input fields. The first is labeled 'EMAIL' and has an envelope icon on its left. The second is labeled 'PASSWORD' and has a lock icon on its left. Below these fields is a link that says 'Forgot password?'. At the bottom of the box is a green button with the text 'Log In'. Below the box, outside the white area, is a link that says 'Create new account' with a mouse cursor icon pointing at it.


Write your email address, make sure you use the same email on the Mobile Blynk App too. Check the box; I agree statement and click on the **Sign Up** button.



Sign Up

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

EMAIL


 electronicclinic117@gmail.com

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

[Sign Up](#)

[Back to Login](#)

A confirmation email will be sent on your email id.



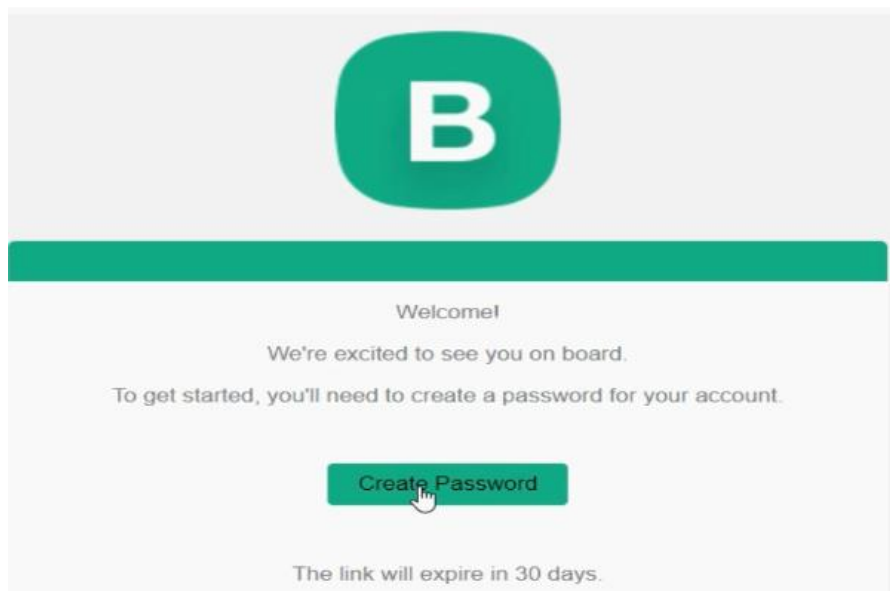
Confirm Your Email Now

Check your inbox for an email from **Blynk**
Click on the link there to confirm your email.

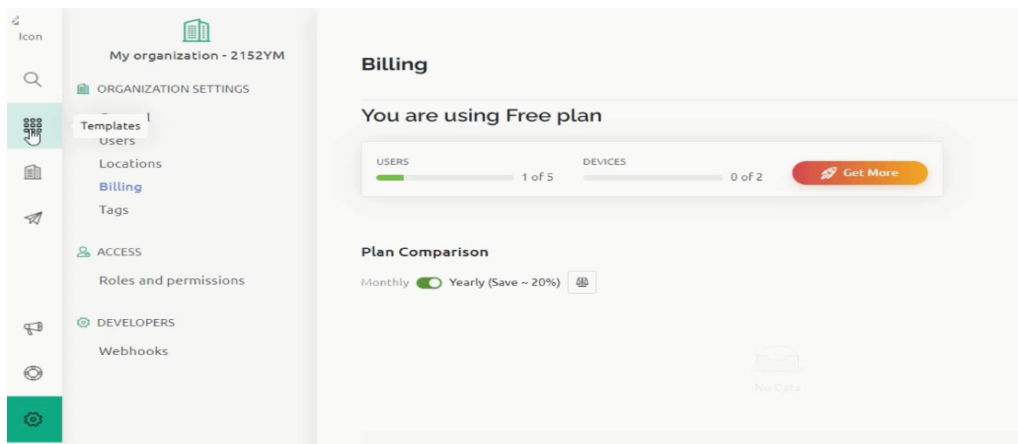
Don't see the email?

Search SPAM folder for an email from **Blynk**
Also add it to your address book.

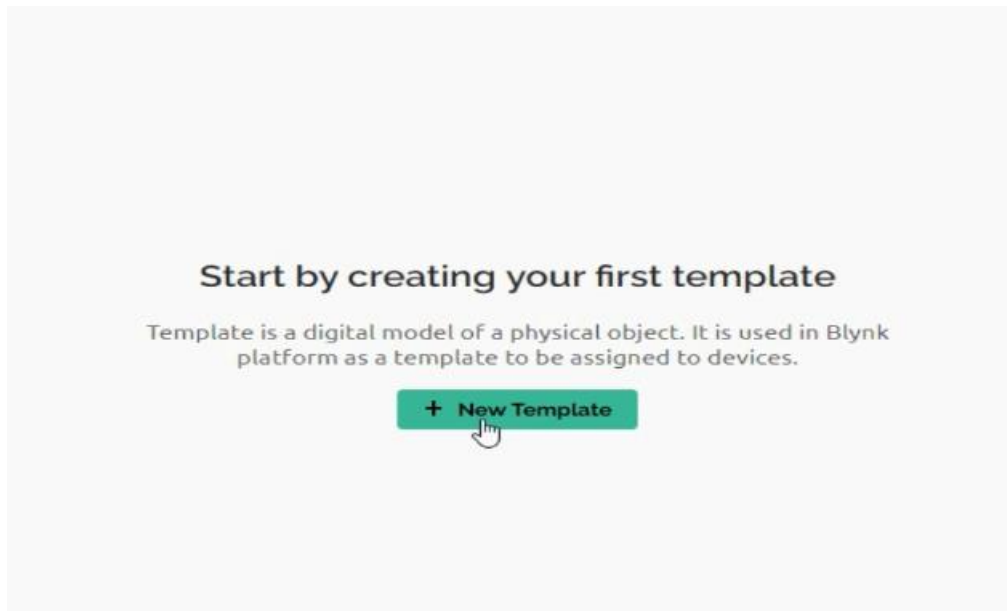
Open the email id, click on the Link sent from the Blynk, and click **Create Password**.



If you want to follow a step by step guide then you can click on the Let's go! Button. It will help you with Hardware setup, IDE, Blynk Library, Code, and Device activation. Free plan supports 5 users and 2 devices. If you want more users and devices then simply click on the **Get More** button. Anyway, I am going to start by clicking on the **Templates**



Then click on the **New Template** to create your first Template



Enter the template name, select the Hardware type, select Connection type, you can also write a description, and finally, click on the **Done** button.

Create New Template

NAME
Getting started

HARDWARE
ESP32

CONNECTION TYPE
WiFi

DESCRIPTION
this is getting started tutorial

32 / 128

Cancel Done

Go to the DataStream's.

The screenshot shows the 'Getting started' form in the Blynk web interface. The form is divided into several sections: 'TEMPLATE NAME' with a text input field containing 'Getting started'; 'HARDWARE' with a dropdown menu set to 'ESP32'; 'CONNECTION TYPE' with a dropdown menu set to 'WIFI'; 'DESCRIPTION' with a text area containing 'this is getting started tutorial'; 'TEMPLATE ID' with a text input field containing 'TjHPLlh8o1jPo'; 'MANUFACTURER' with a text input field containing 'My organization 2152YM'; and 'OFFLINE IGNORE PERIOD' with a time picker set to '00 hrs 00 mins 00 secs'. On the right side, there is a 'TEMPLATE IMAGE (OPTIONAL)' section with an 'Add image' button and a note about upload requirements. Below that is a 'FIRMWARE CONFIGURATION' section with a code block containing two lines of Blynk code: `#define BLYNK_TEMPLATE_ID "TjHPLlh8o1jPo"` and `#define BLYNK_DEVICE_NAME "Getting started"`. A mouse cursor is pointing at the second line of code. Below the code block, there is a note: 'Template ID and Device Name should be included at the top of your main firmware'.

On the **Datastreams** click on the **New Datastream** and select Virtual Pin.

The screenshot shows the 'Datastreams' section in the Blynk web interface. The 'Datastreams' tab is selected in the top navigation bar. The main content area has a heading 'Datastreams' and a subheading 'Datastreams is a way to structure data that regularly flows in and out from device. Use it for sensor data, any telemetry, or actuators.' Below this, there is a '+ New Datastream' button. A dropdown menu is open, showing five options: 'Digital', 'Analog', 'Virtual Pin', 'Enumerable', and 'Location'. A mouse cursor is pointing at 'Virtual Pin'. At the bottom of the dropdown menu, there is an 'UPGRADE' button.

Write the name, select virtual PIN, Data Type, you can also select units, and you can also set the Minimum and Maximum limits. After all the parameters are set then you can click on the Create button.

Virtual Pin Datastream

NAME: LED ALIAS: LED

PIN: V0 DATA TYPE: Integer

UNITS: None

MIN: 0 MAX: 1 DEFAULT VALUE: 0

☐ ADVANCED SETTINGS

Cancel Create

Now again click on the New Datastream button and follow the same exact steps for the Potentiometer. The virtual PIN is automatically incremented. After you have defined all the parameters then you can click on the Create button. Anyway, you can see our two datastreams are ready and now we can click on the Save button.

Getting started Duplicate Edit

Info Metadata **Datastreams** Events Automations Web Dashboard Mobile Dashboard

Search datastream

Id	Name	Alias	Color	Pin	Data Type	Units	Is Raw	Min	Max
1	LED	LED		V0	Integer		false	0	1
2	Pot	Pot		V1	Integer		false	0	1000

Now go to **Web Dashboard** and click on the Edit Button.

Getting started Cancel Save

Info Metadata Datastreams Events Automations **Web Dashboard** Mobile Dashboard

Widget Box 0 of 30 widgets

CONTROL

Switch ☒

Slider

Number Input

Image Button

Device name Online

Device Owner Company Name

Tag X

Show map UPGRADE

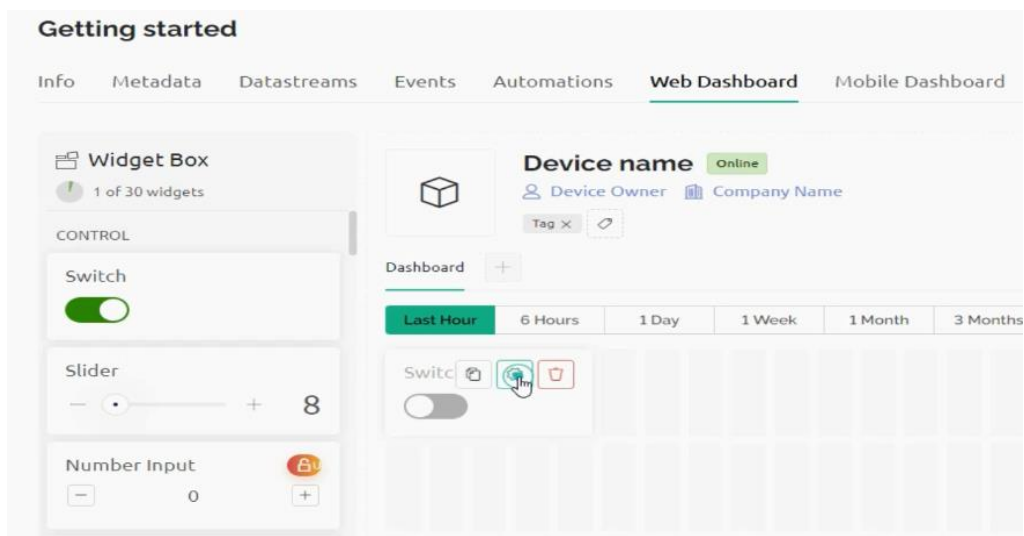
Dashboard

Last Hour 6 Hours 1 Day 1 Week 1 Month 3 Months Custom

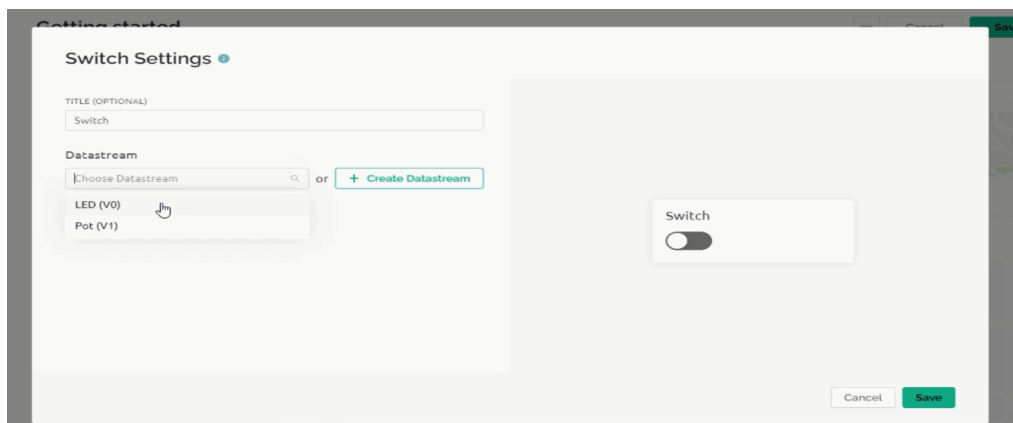
Add new widget

Double click the widget on the left or drag it to the canvas

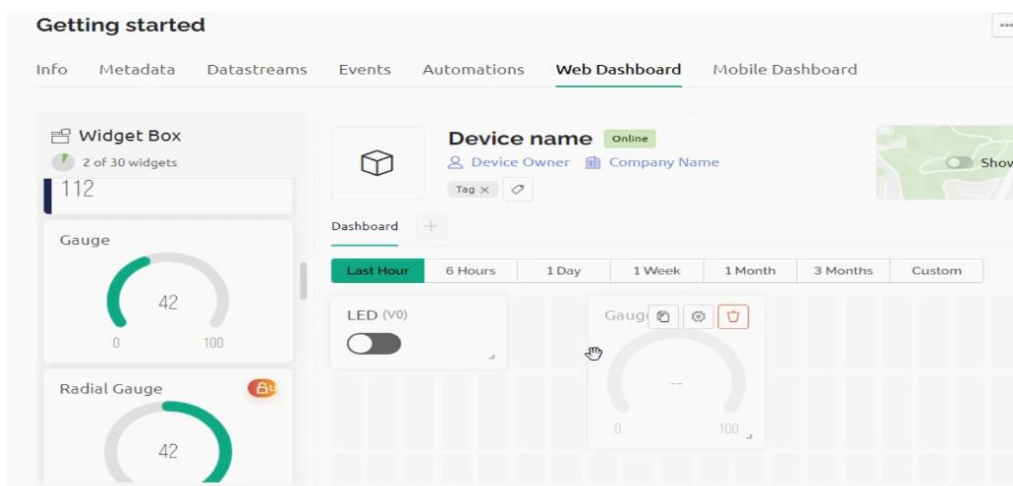
Drag and drop the Switch for controlling the LED. Click on the settings.



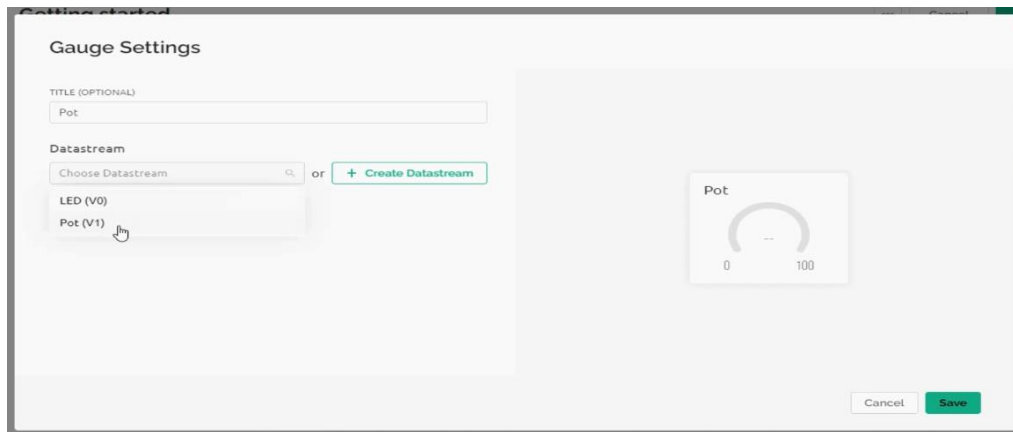
Select the DataStream “LED(Vo)”, activate the Show on/off labels, If you want you can also change the color, and finally, click on the Save button.



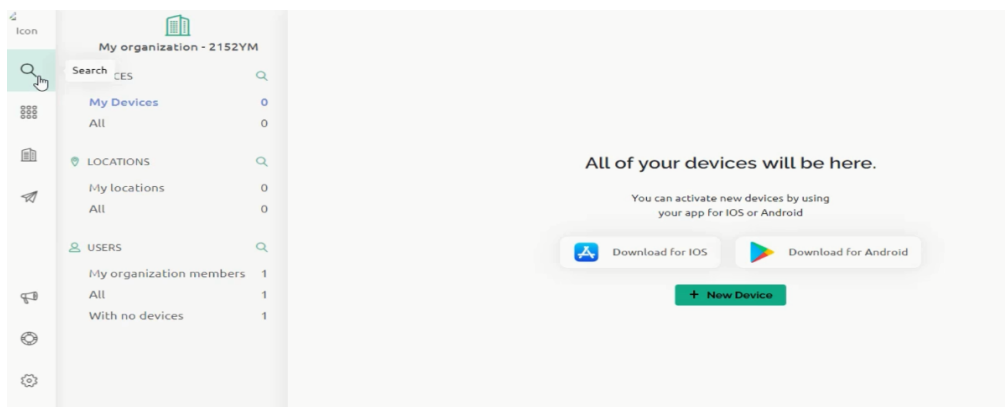
Now, I am going to add a Gauge for monitoring the Potentiometer. The same way you can click on the gauge settings button and select the datastream and do other settings.



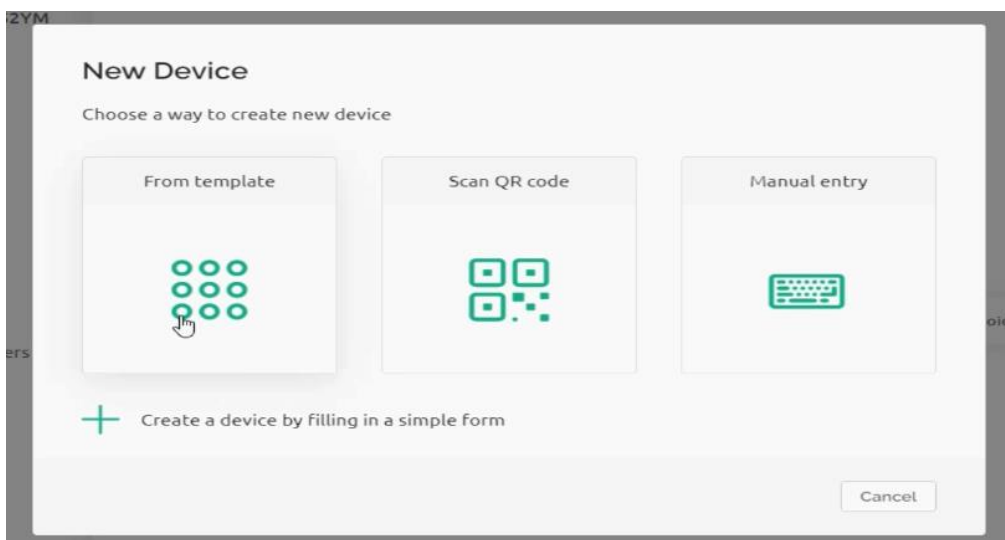
Once you have added all the widgets then click on the Save button.



Click on the Search, then click on **New Device**.



Click on **from template** to create a new device.



Select the template we just created, write the device name, and finally click on the Create button.

New Device

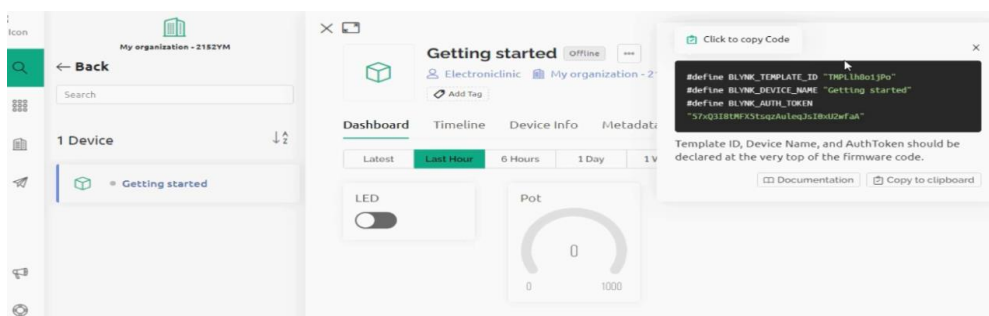
Create new device by filling in the form below

TEMPLATE
Getting started

DEVICE NAME
Getting started

Cancel Create

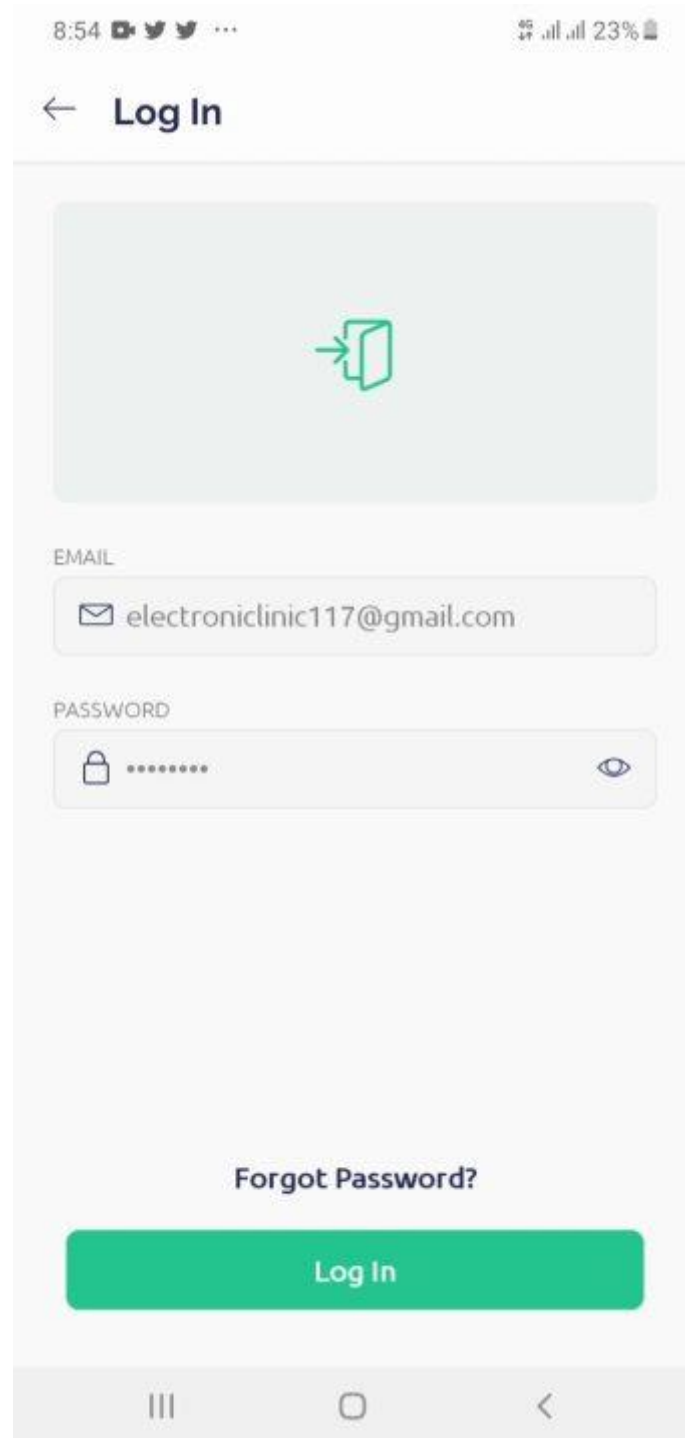
Dashboard is ready, now use this button to control the LED and Gauge for monitoring the Potentiometer.



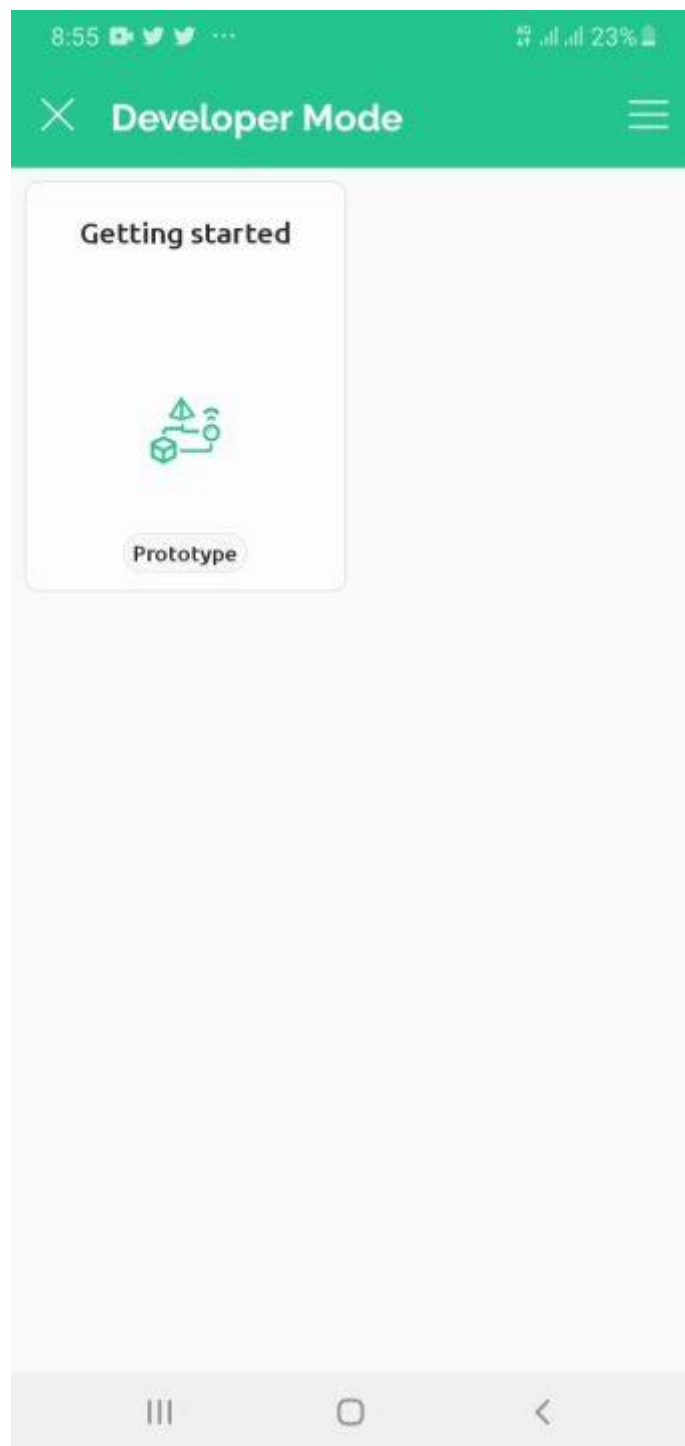
Now, we have to use the Template ID, Device Name, and Authorization Token in the programming. In the image above, you can see the BLYNK_TEMPLATE_ID, BLYNK_DEVICE_NAME, and BLYNK_AUTH_TOKEN on the right side. We are going to use these in the programming. Copy the TEMPLATE_ID and paste it next to the BLYNK_TEMPLATE_ID. Repeat the same steps for the Device Name and Authorization Token.

Blynk IoT Mobile Dashboard:

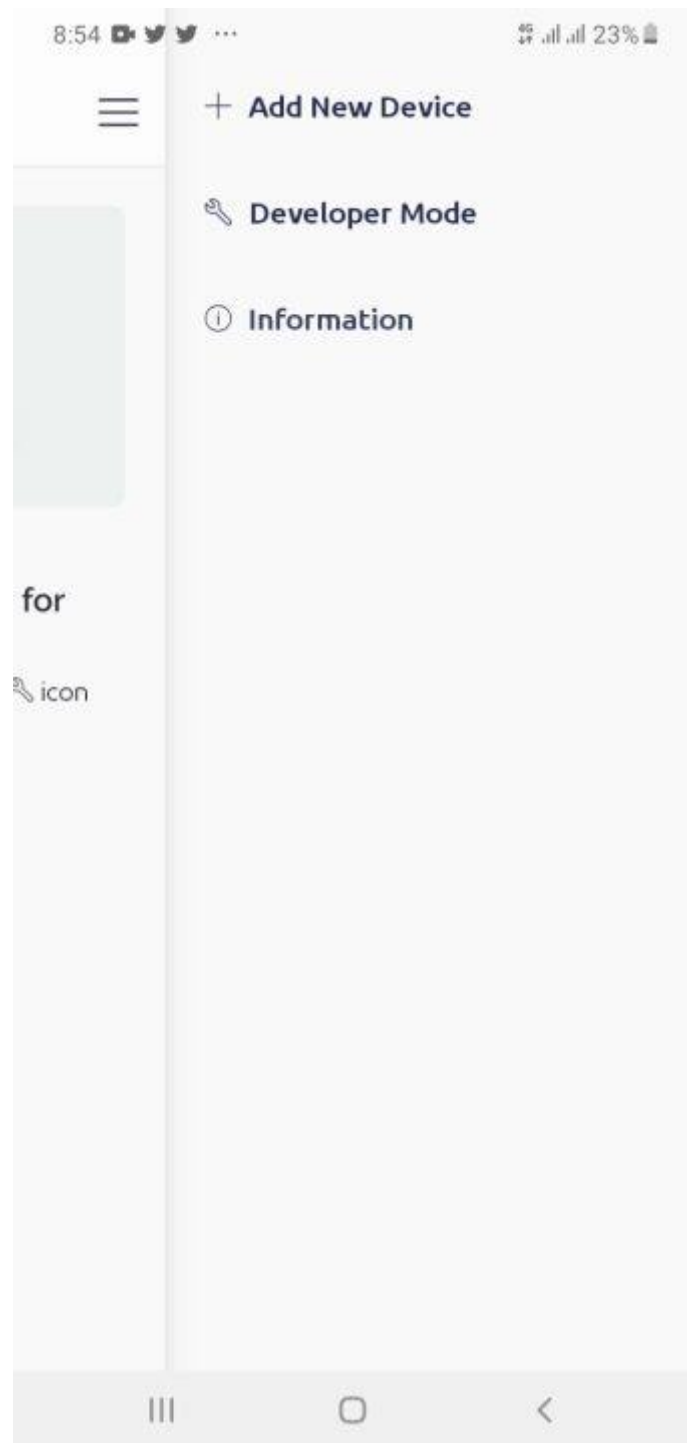
If you also want to use your cell phone for controlling and monitoring different devices and sensors then you will need to install the **Blynk IoT App**. Go to the AppStore and search for the **Blynk** App make sure you install the **Blynk IoT**. Once the Blynk IoT App is installed then login with the same Gmail id and password.



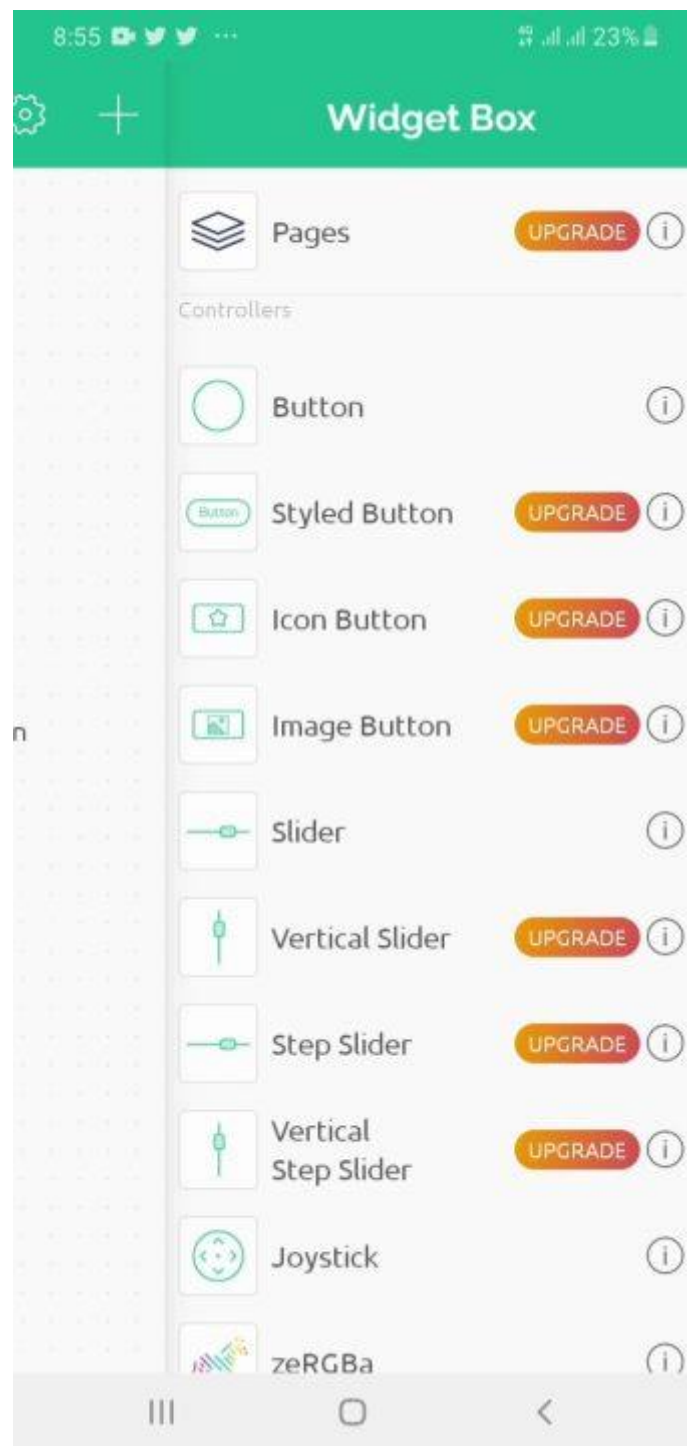
Then click on the **Getting Started** which we created in the **Web dashboard**; it will appear in the **Blynk mobile app**.



Then click on the developer mode to add the widgets.



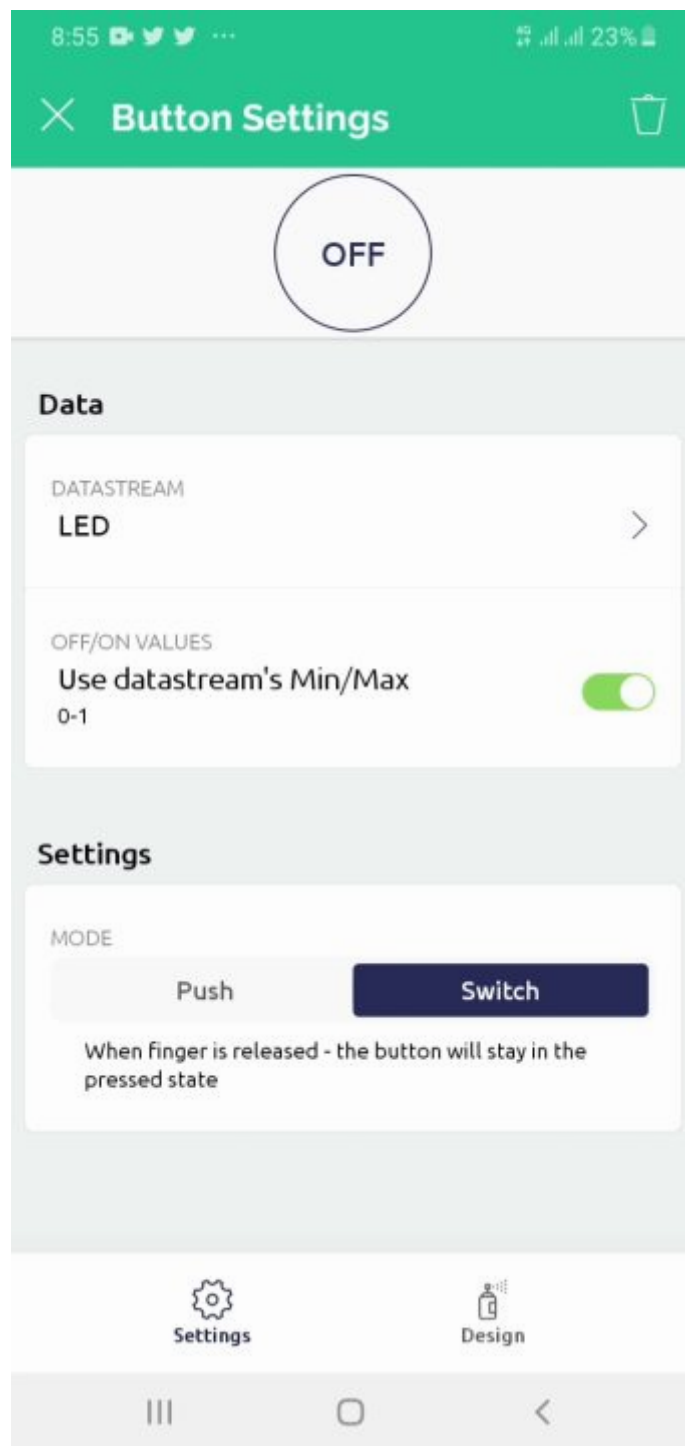
Then click on the widget box and add a button.



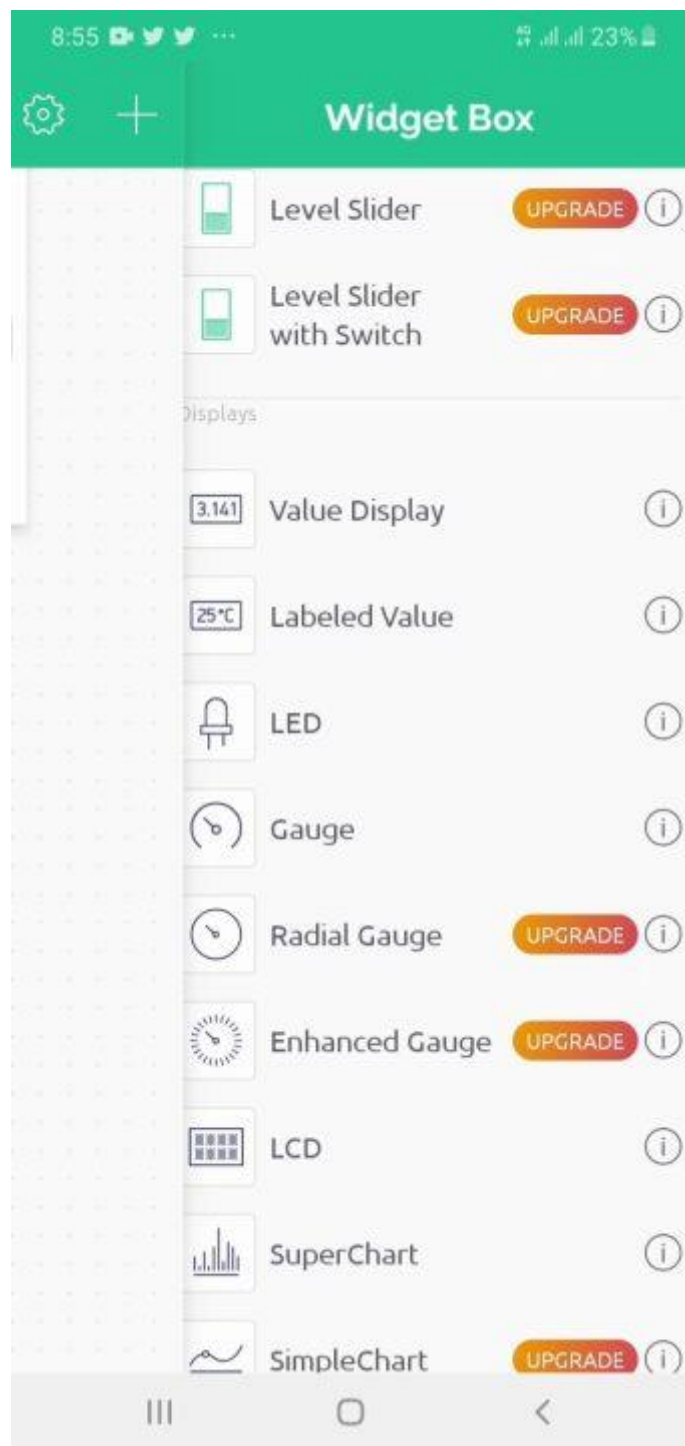
Then click on the button and link the variable LED variable.
So click on the LED (Vo).



Under the setting, select switch mode.



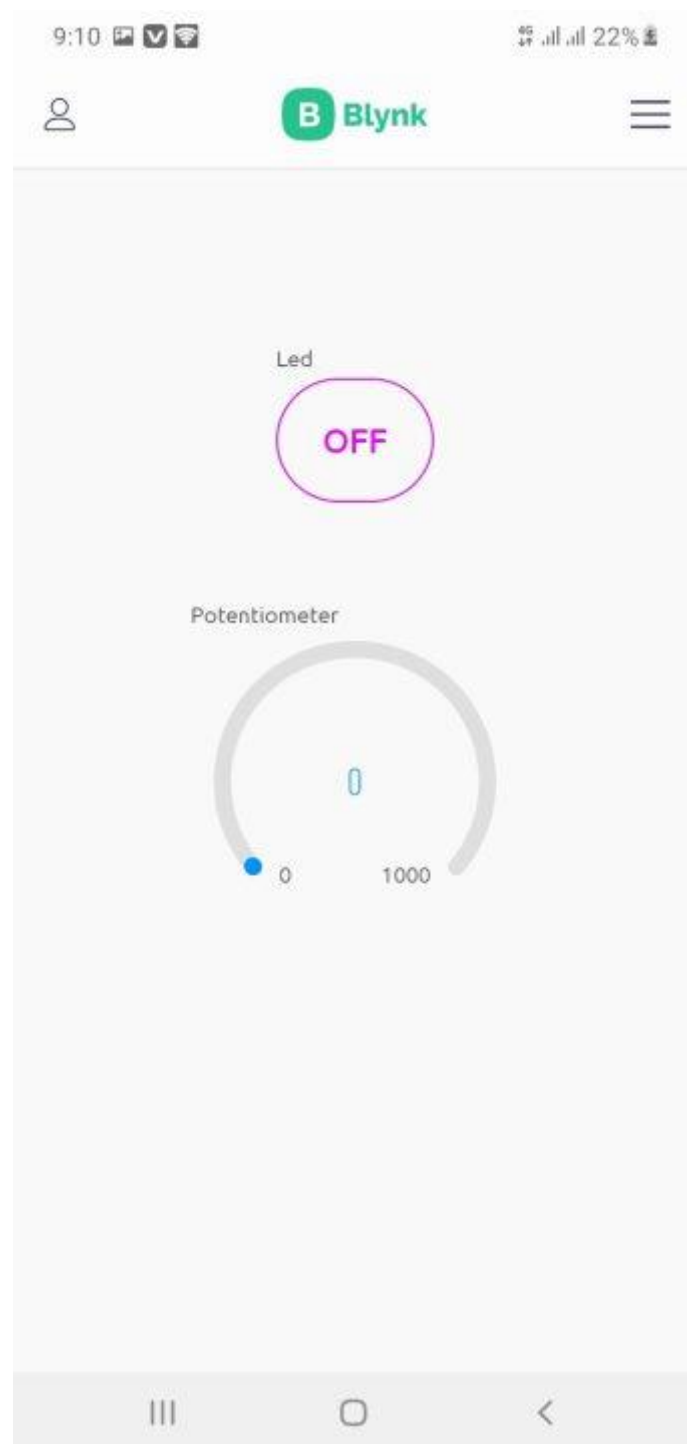
Then again click on the add widget button and this time add a Gauge.



Then link the POT (V1) variable with it.



My Blynk IoT App is ready.



use this Mobile app to control the LED and for monitoring the Potentiometer. As I have said earlier, instead of using the LED you can use High ampere relays and MOSFETs for controlling high Amps loads and the same thing applies to the Potentiometer. You can use any digital or analog sensor.