UNIVERSIDAD MAYOR DE SAN ANDRÉS
CARRERA DE INFORMÁTICA

NODEMCU ESP8266 Y BLYNK, LA COMBINACIÓN PERFECTA

ARDUINO

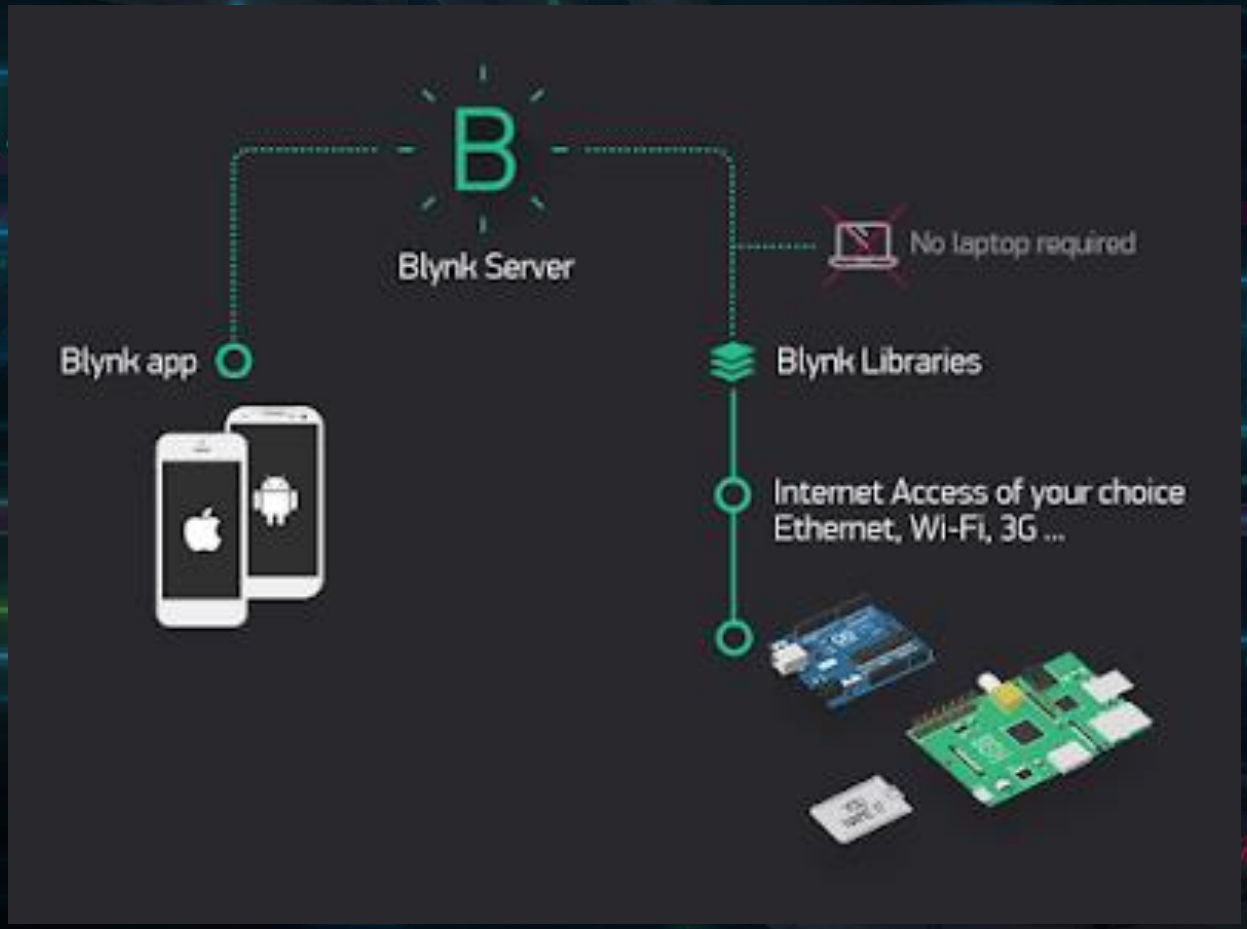
Lic. Arnaldo Muñoz Mendoza

BLYNK

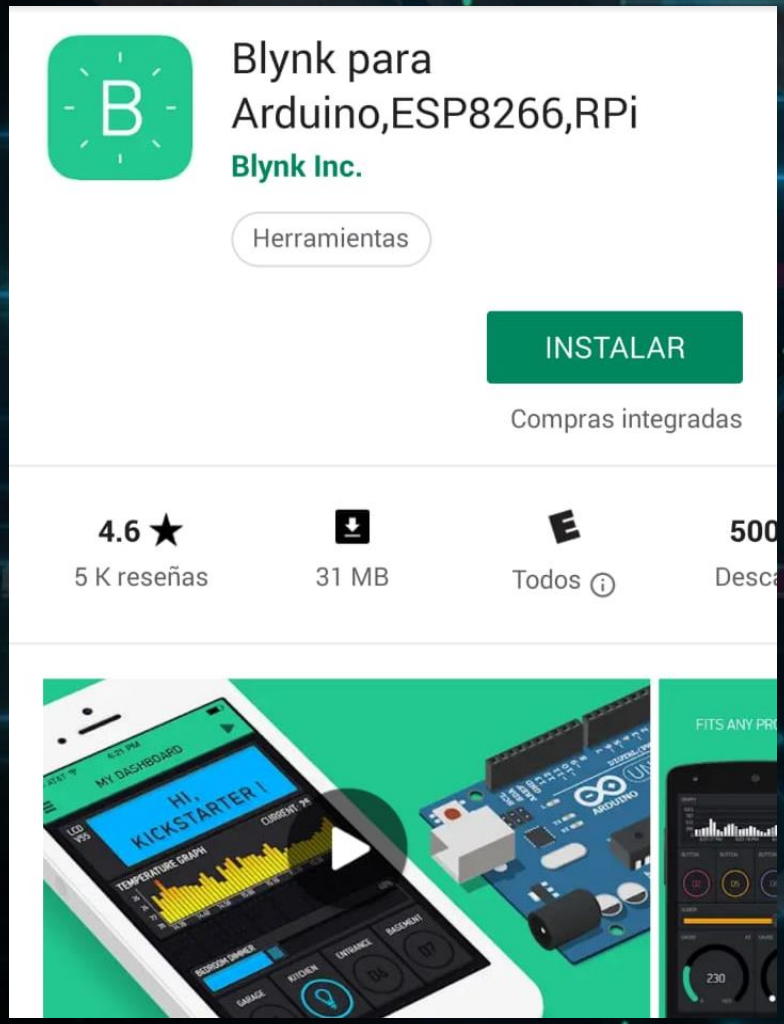
BLYNK

Blynk es una plataforma con aplicaciones iOS y Android que permite controlar ciertos microcontroladores como ser : Arduino, Rasberry Pi y otros.

ARQUITECTURA DE BLYNK



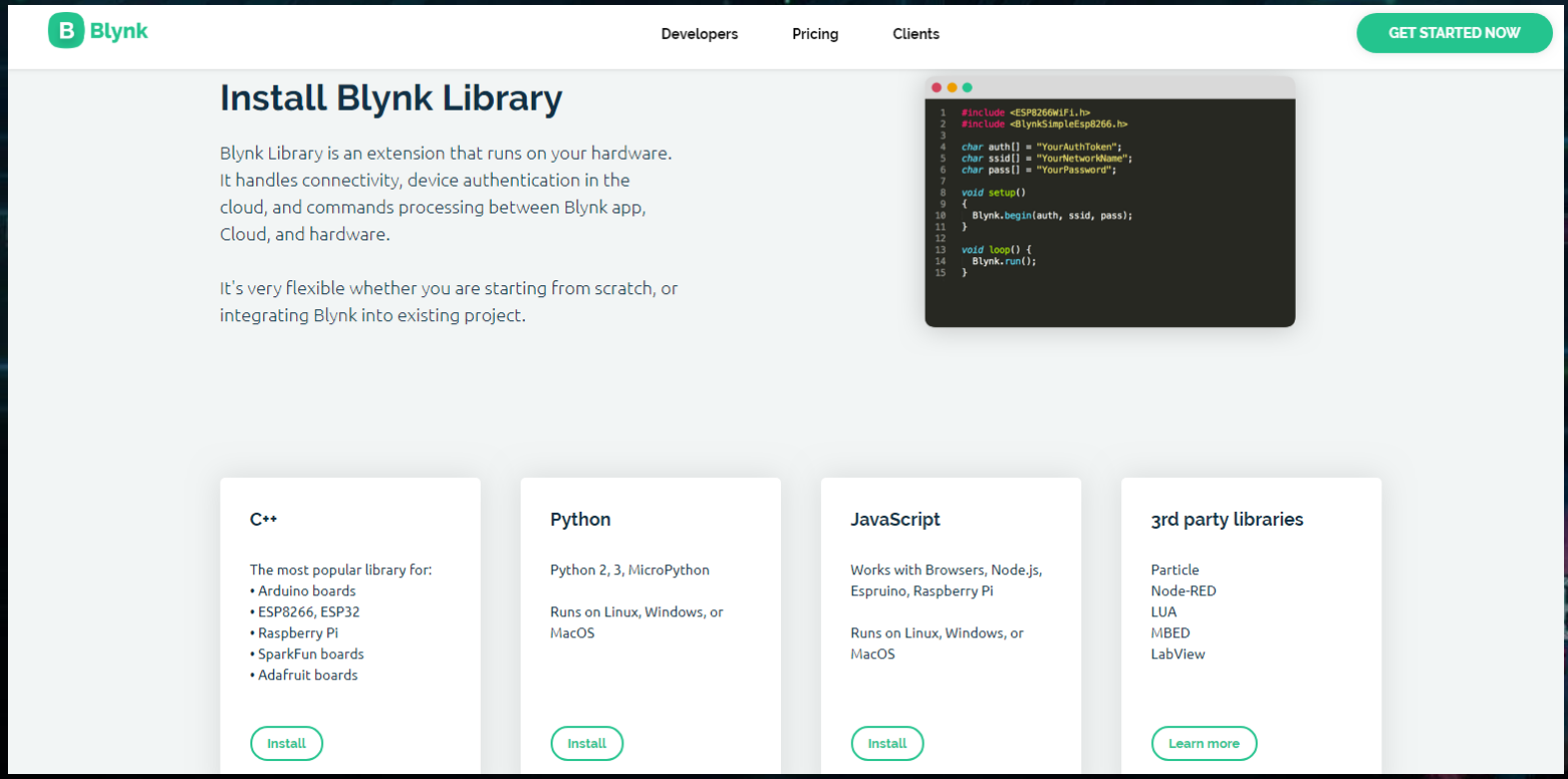
INSTALACIÓN



La aplicación Blynk esta disponible en *Play Store* y *Apple Store.*

INSTALACIÓN

Para que Blynk pueda interactuar con el Nodemcu necesitara de una librería. (https://blynk.io/en/getting-started)



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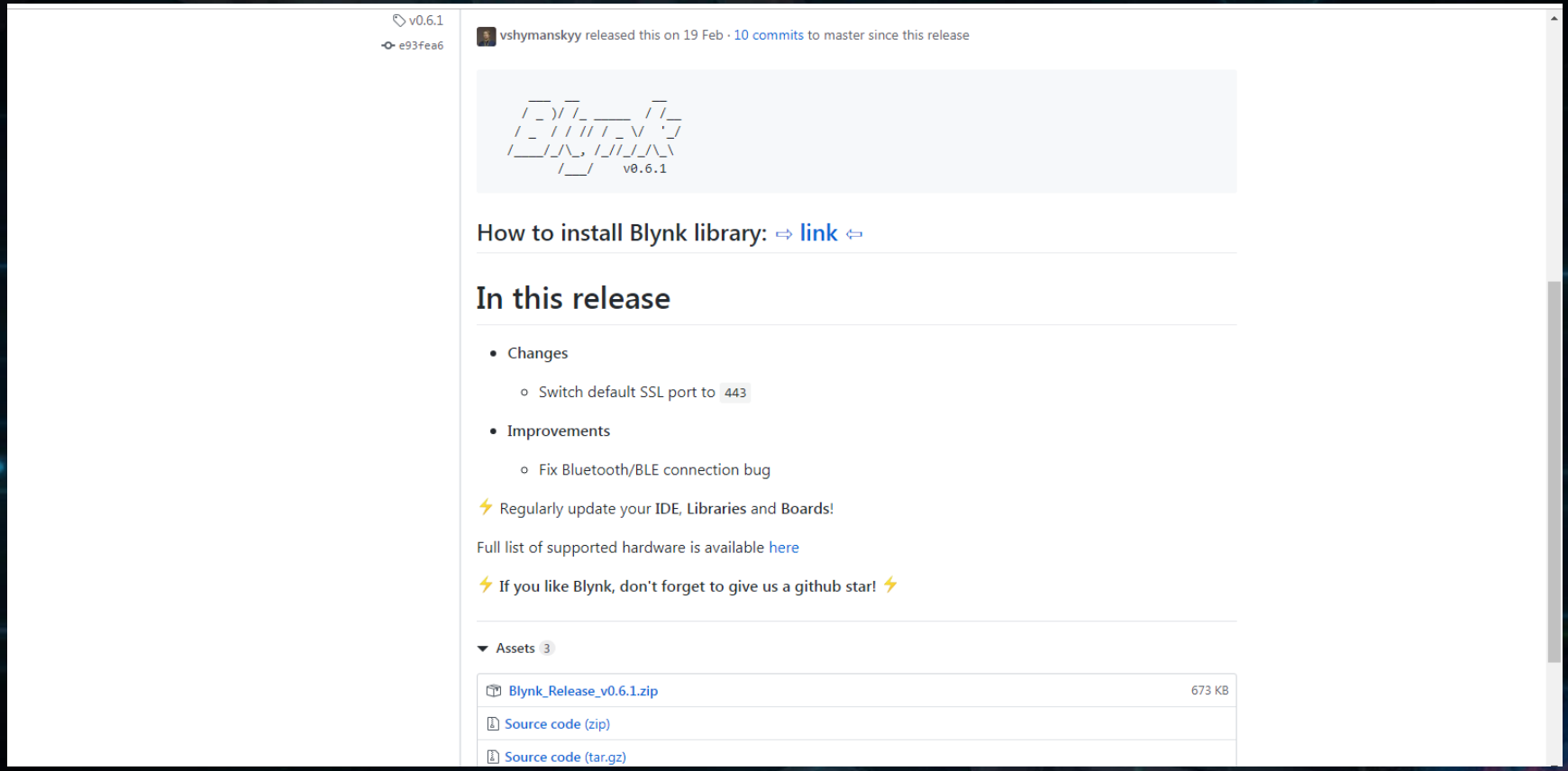


v0.6.1

e93fea6

vshymanskyy released this on 19 Feb · 10 commits to master since this release

```
   ___ __             __
  / _ )/ /_ _____  / /__
 / _  / / // / _ \/  '_/
/____/_/\_, /_//_/_/\_\
       /___/    v0.6.1
```

How to install Blynk library: ⇨ link ⇦

In this release

- Changes
  - Switch default SSL port to `443`
- Improvements
  - Fix Bluetooth/BLE connection bug

⚡ Regularly update your **IDE**, **Libraries** and **Boards**!

Full list of supported hardware is available here

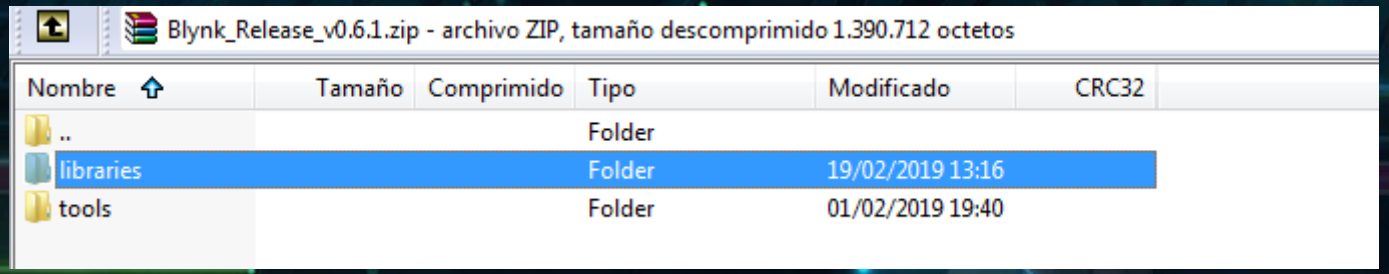
⚡ **If you like Blynk, don't forget to give us a github star!** ⚡

▼ Assets 3

Blynk_Release_v0.6.1.zip	673 KB
Source code (zip)	
Source code (tar.gz)	

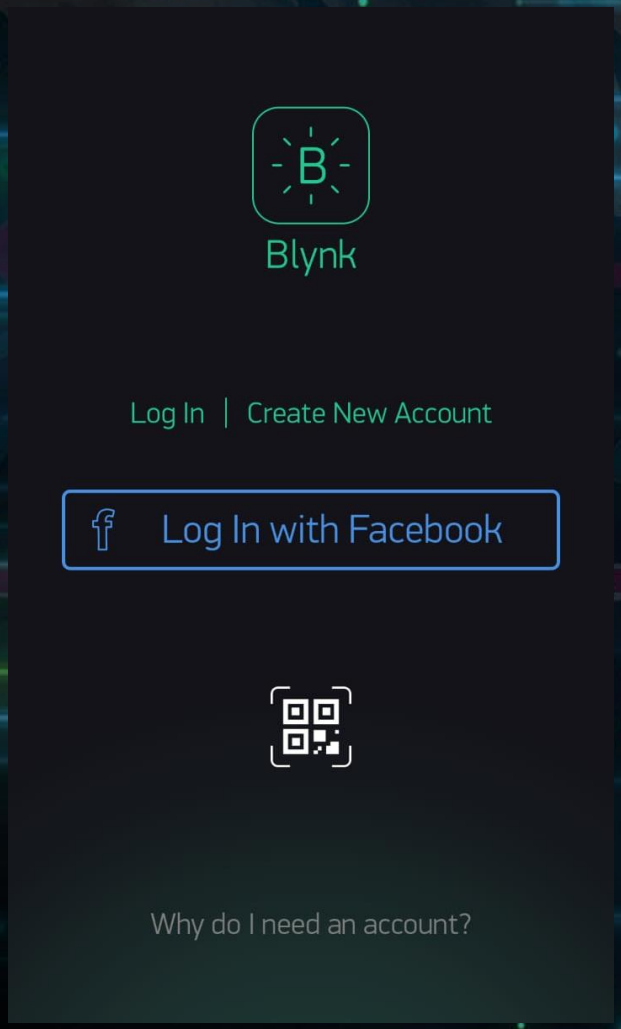
INSTALACIÓN

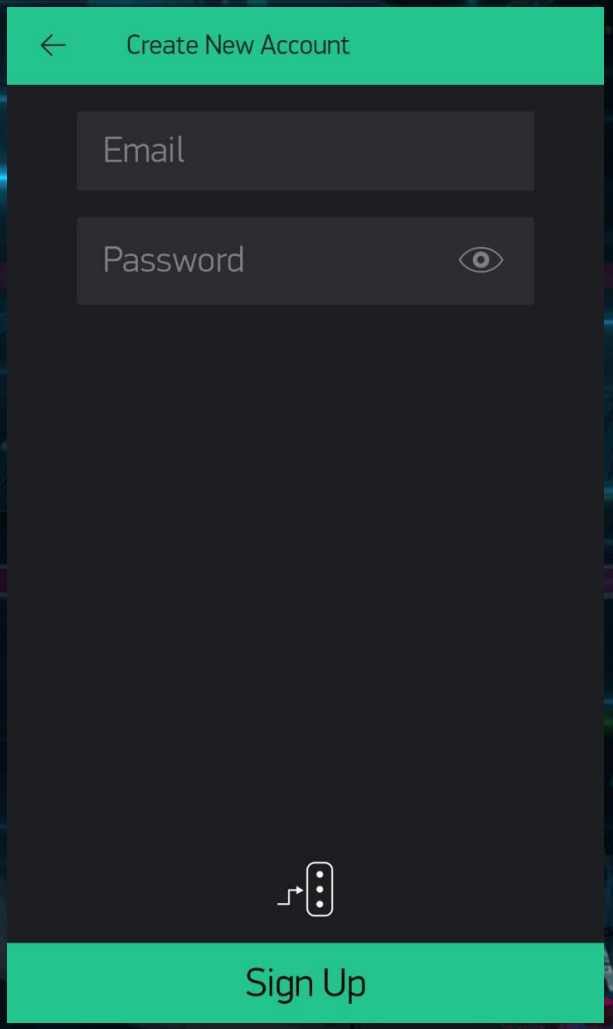
De la carpeta que se descargo, copiar las carpetas que se encuentran en libraries.



Pegar en la siguiente dirección :
C:\Users\nomUsuario\Documents\Arduino

HOLA MUNDO BLYNK





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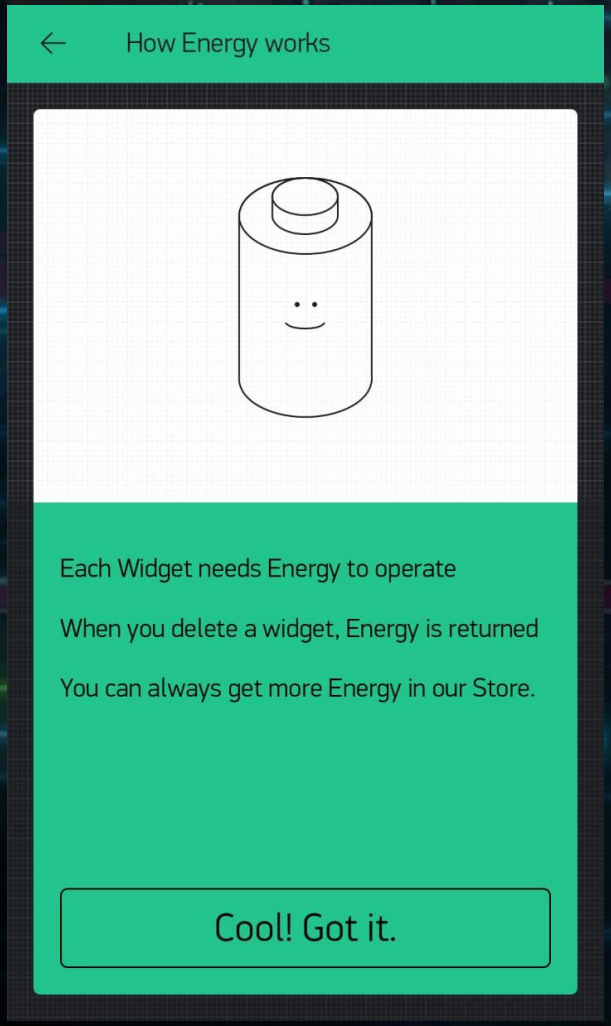

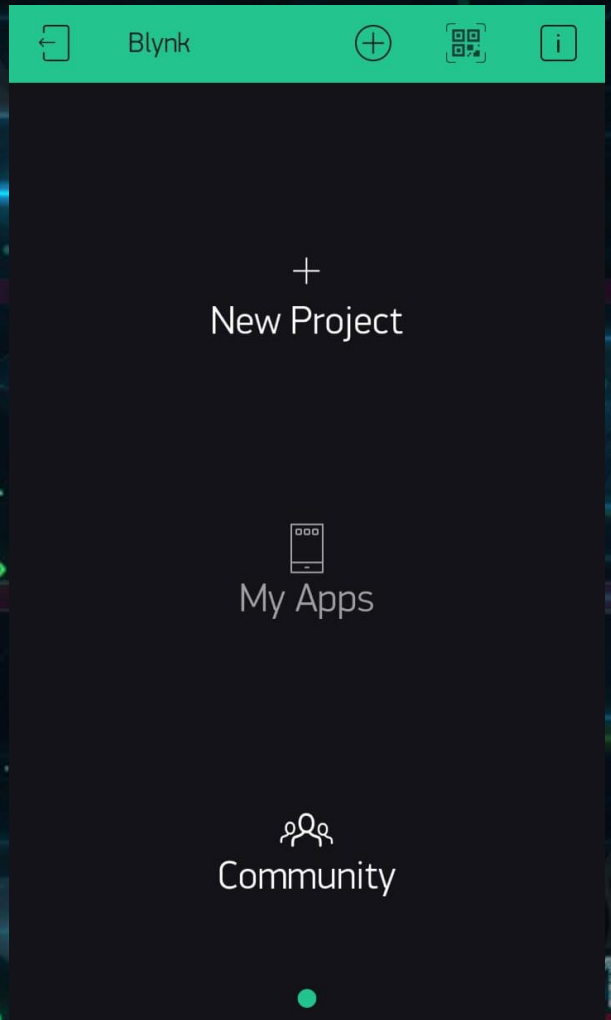

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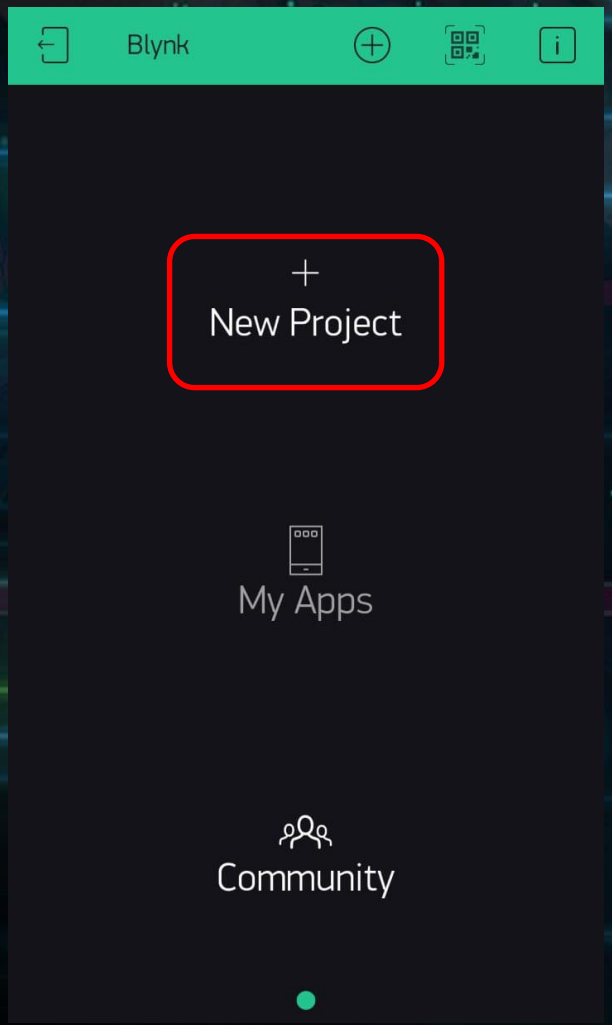

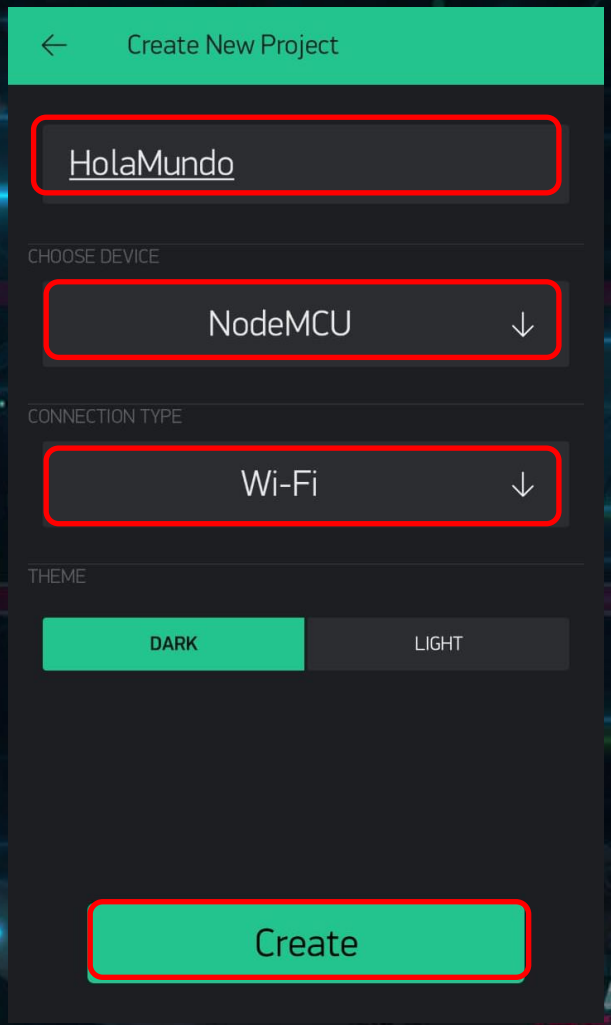

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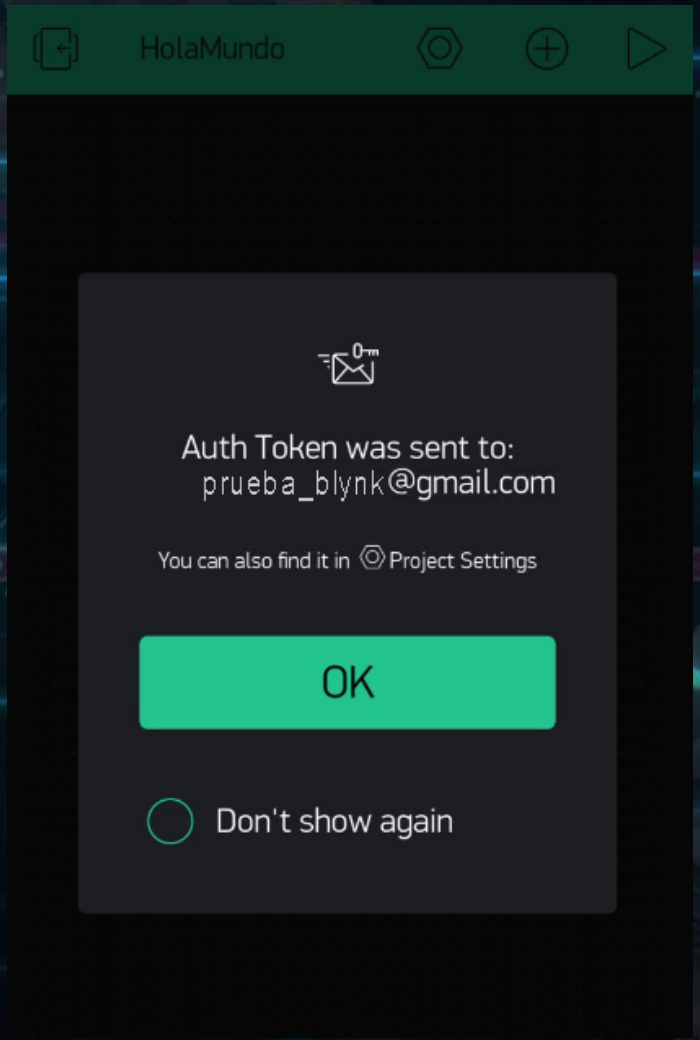


HOLA MUNDO BLYNK

Auth Token for HolaMundo project and device HolaMundo

Blynk <dispatcher@blynk.io> Cancelar suscripción
para mí

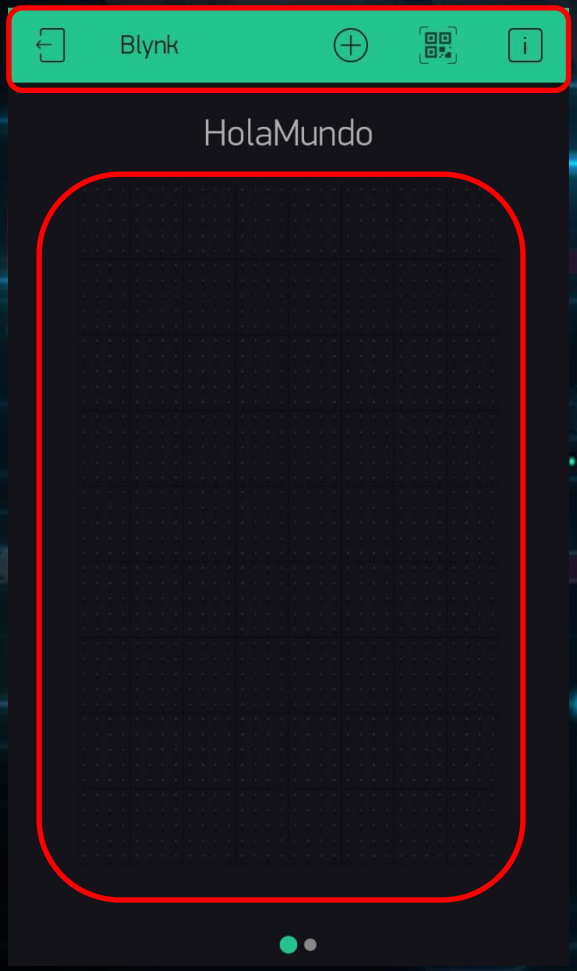
inglés > español Traducir mensaje

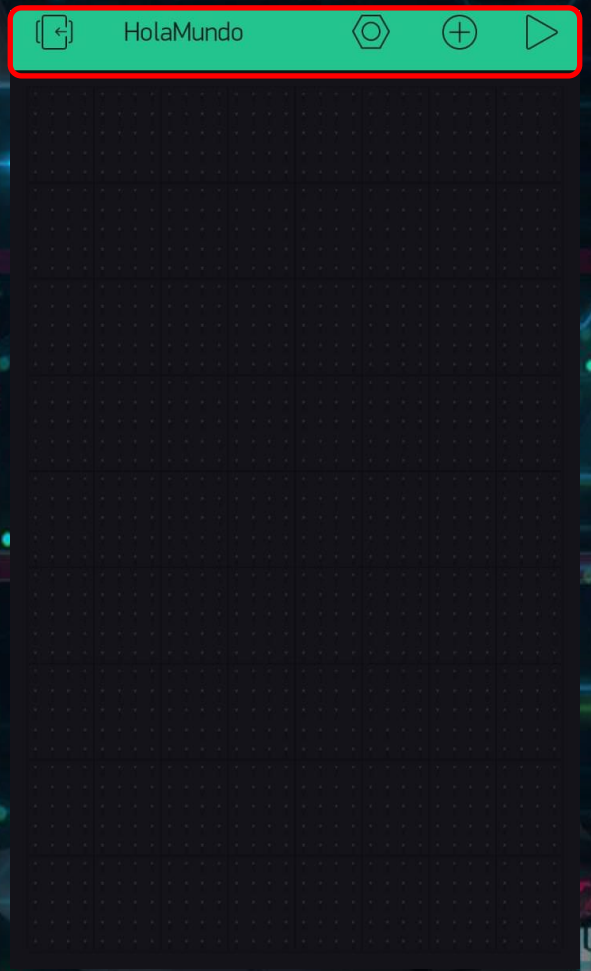
Auth Token d27caeb15 28

Happy Blynking!
-
Getting Started Guide -> https://www.blynk.cc/getting-started
Documentation -> http://docs.blynk.cc/
Sketch generator -> https://examples.blynk.cc/

Latest Blynk library -> https://github.com/blynkkk/blynk-library/releases/download/v0.6.1/Blynk_Release_v0.6.1.zip
Latest Blynk server -> https://github.com/blynkkk/blynk-server/releases/download/v0.41.5/server-0.41.5.jar
-

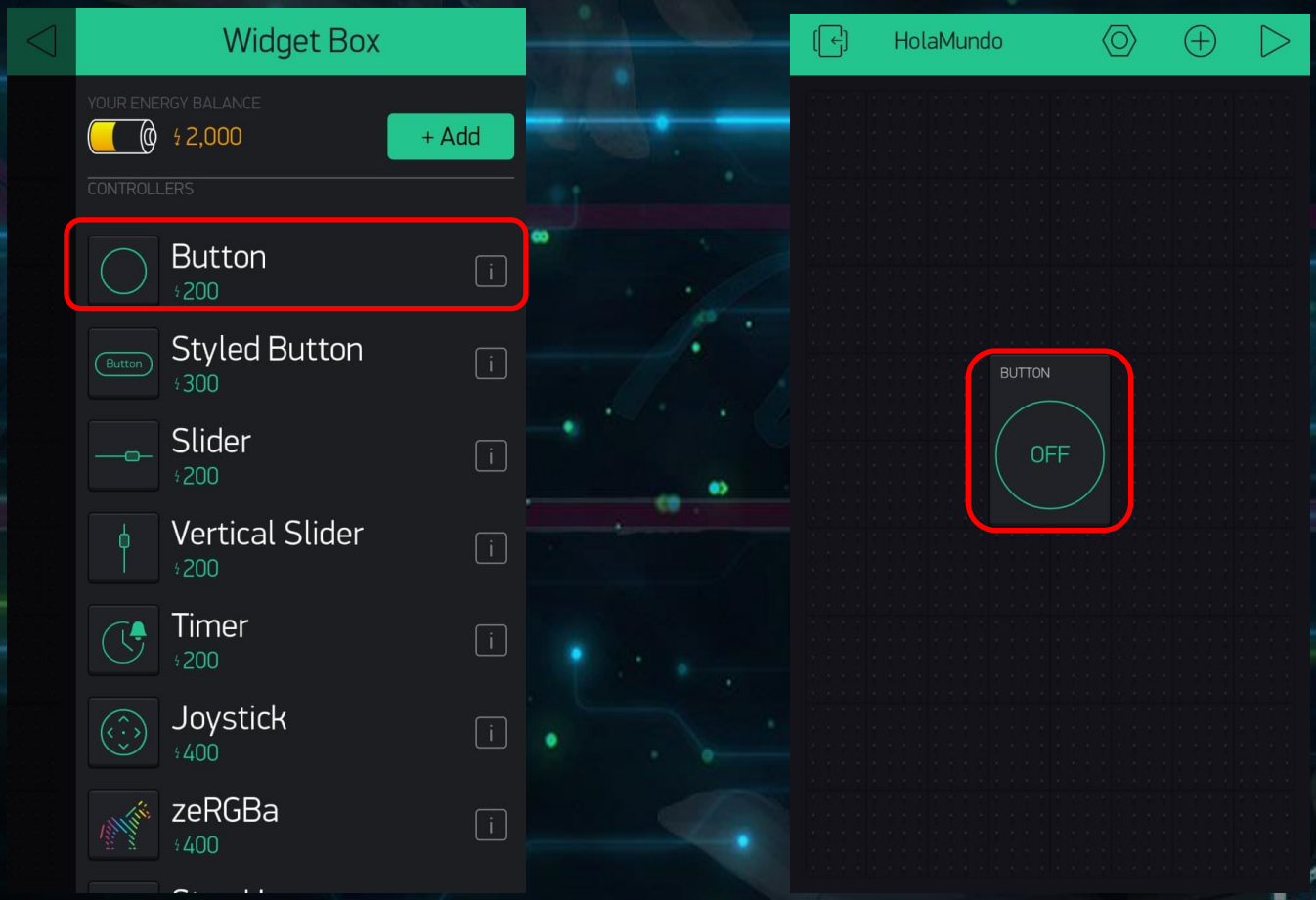
HOLA MUNDO BLYNK





MAKERS
INFORMATICA

HOLA MUNDO BLYNK



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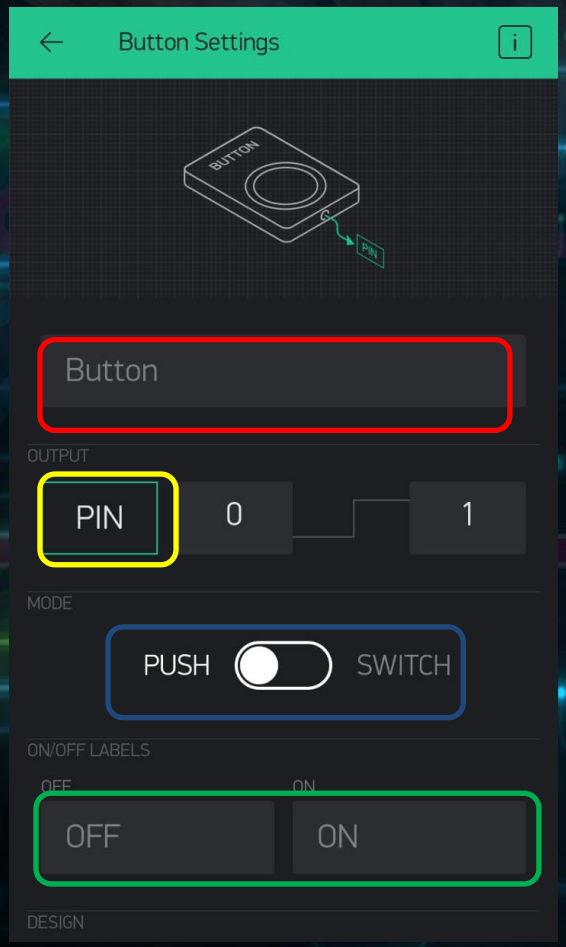

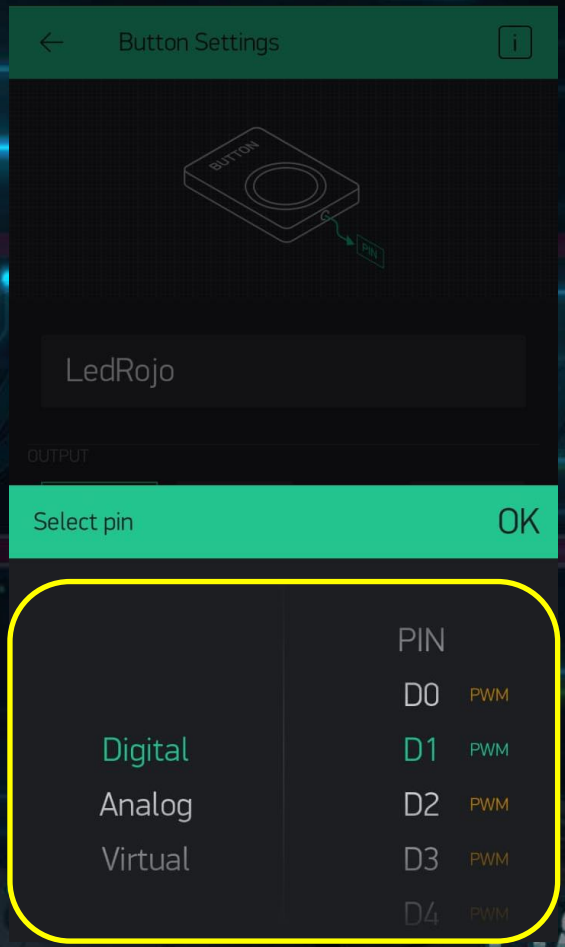

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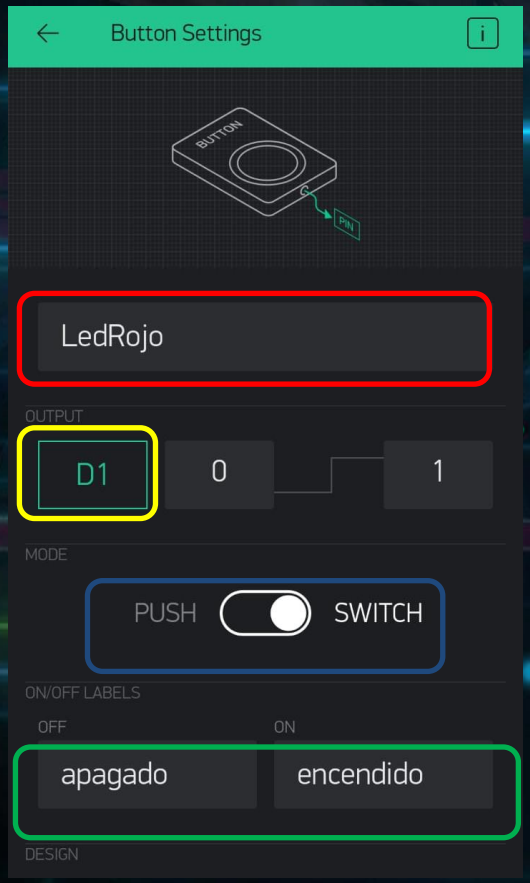
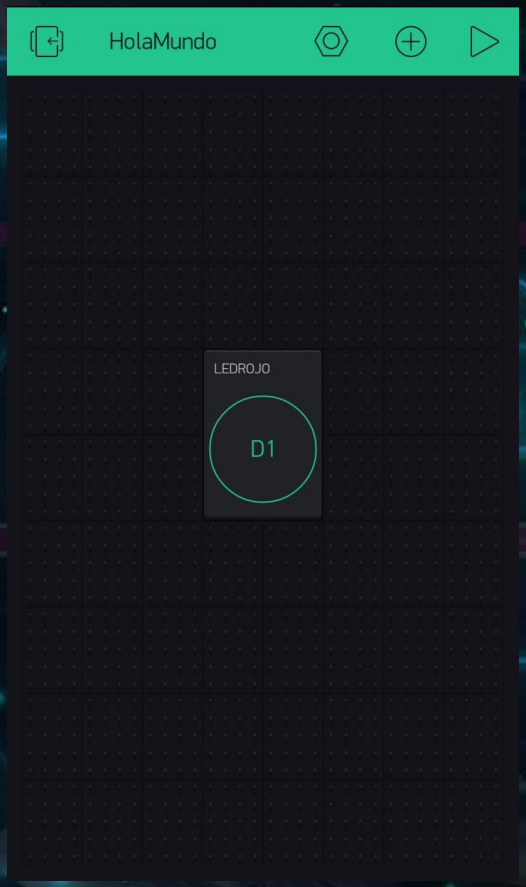
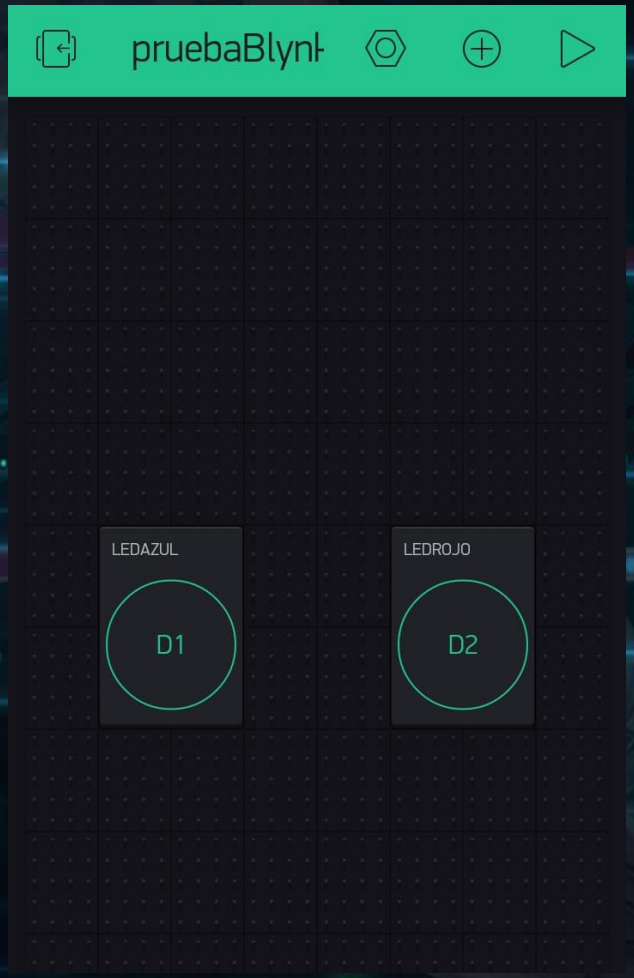
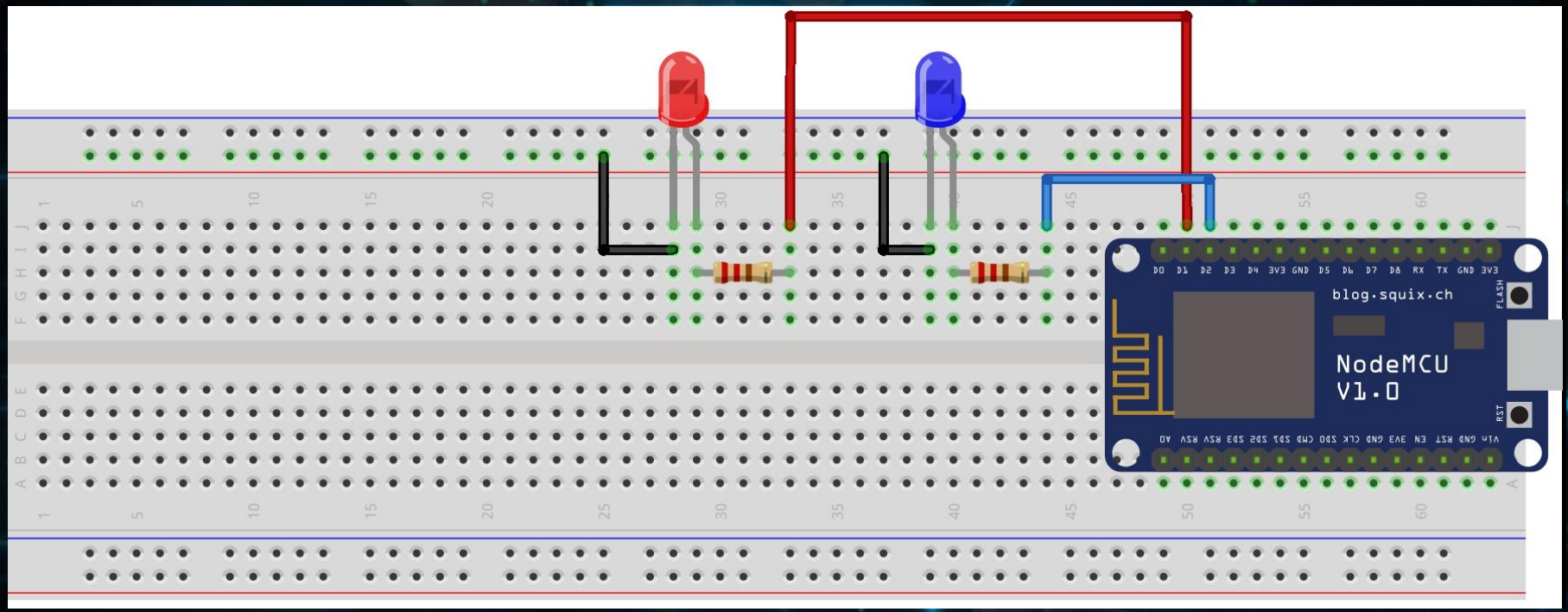




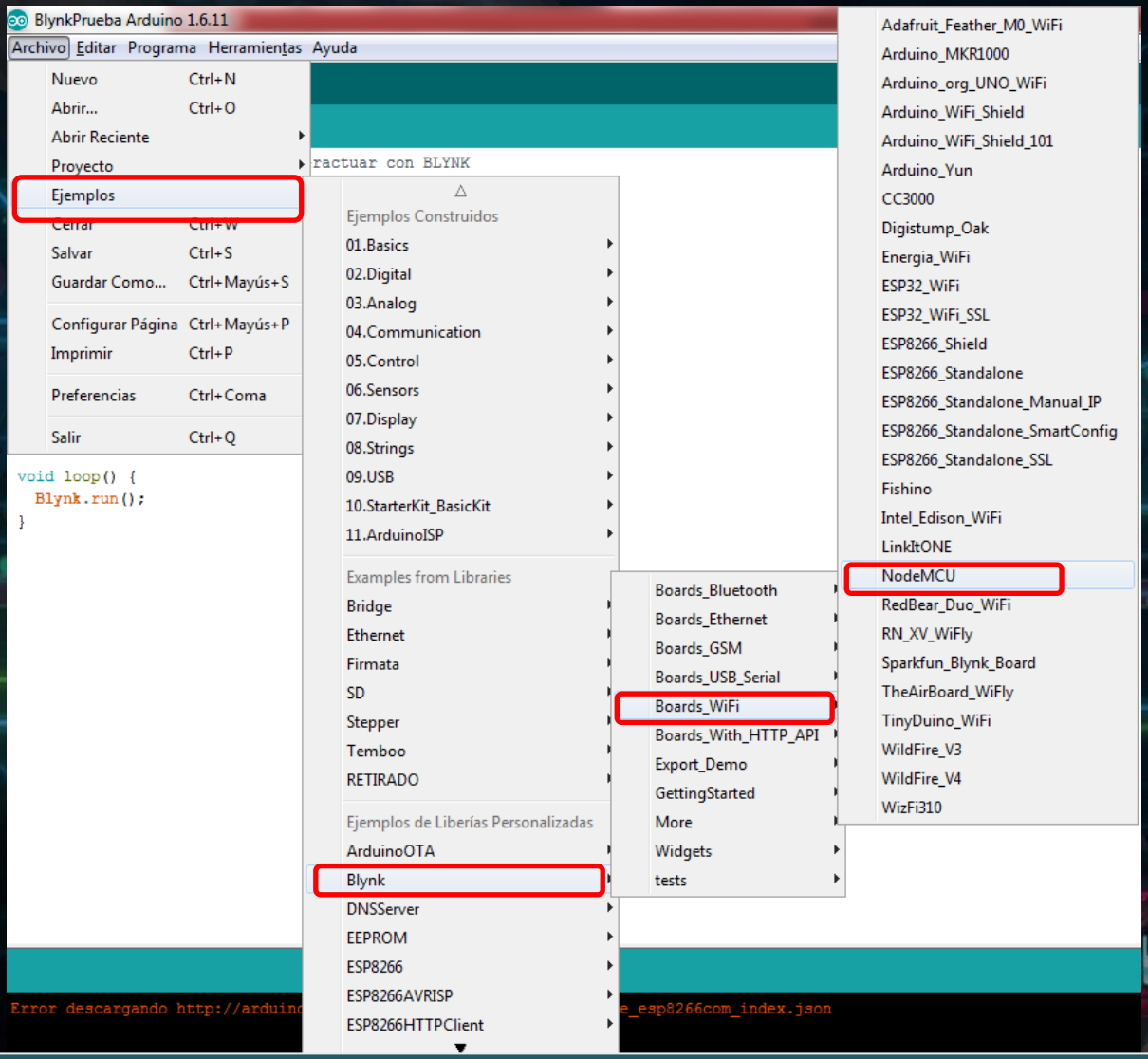
TAREA BLYNK



ESQUEMA



ESQUEMA



Archivo > Ejemplos > Blynk > Boards_WiFi > Nodemcu

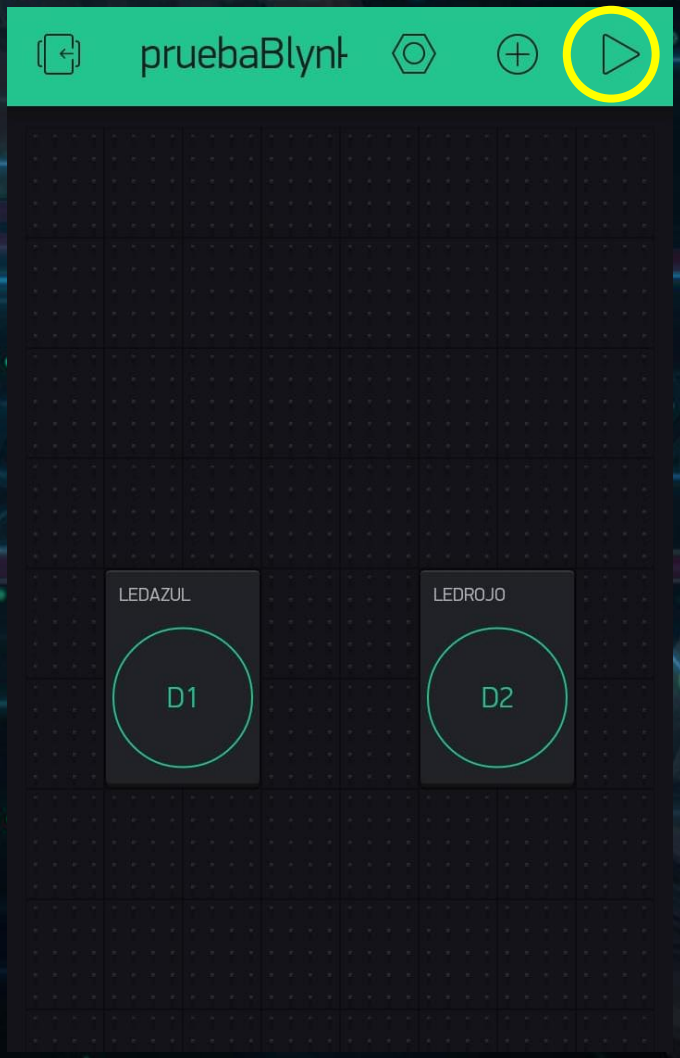
CÓDIGO BLYNK

Archivo Editar Programa Herramientas Ayuda

NodeMCU §

```
#define BLYNK_PRINT Serial

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

char auth[] = "COPIAR_EL_TOKEN_GENERADO";

char ssid[] = "NOMBRE_DE_RED_WIFI";
char pass[] = "CONTRASEÑA_DE_LA_RED_WIFI";

void setup()
{
  Serial.begin(115200);
  Blynk.begin(auth, ssid, pass);
}

void loop()
{
  Blynk.run();
}
```

HOLA MUNDO BLYNK



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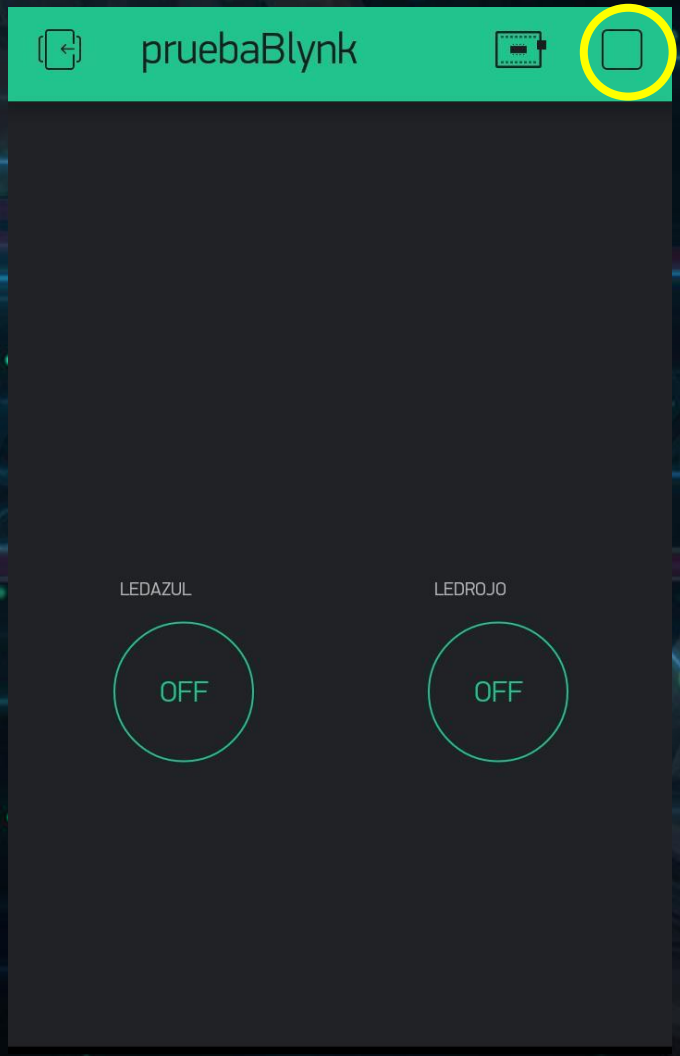
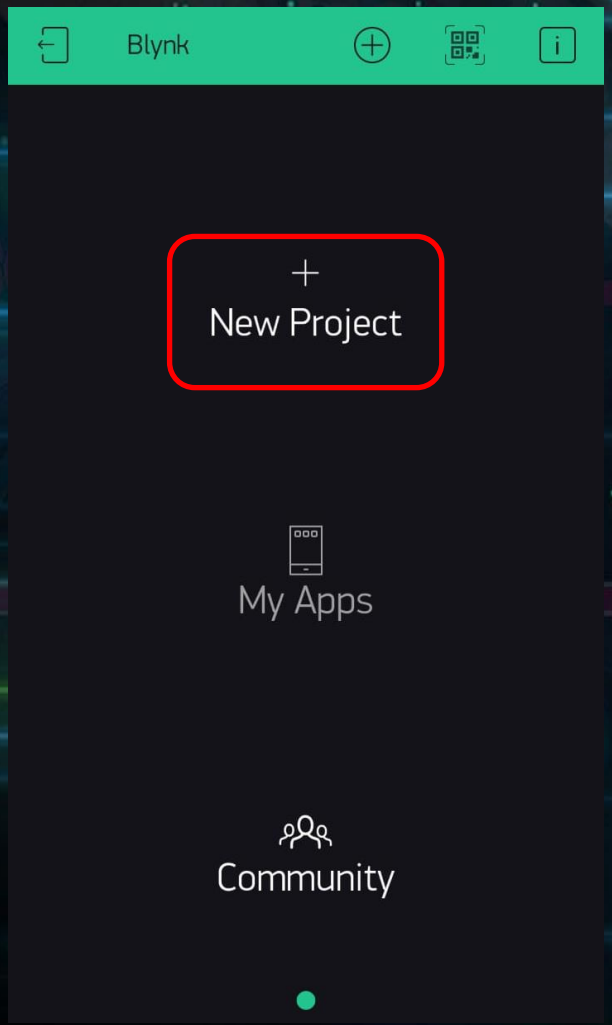
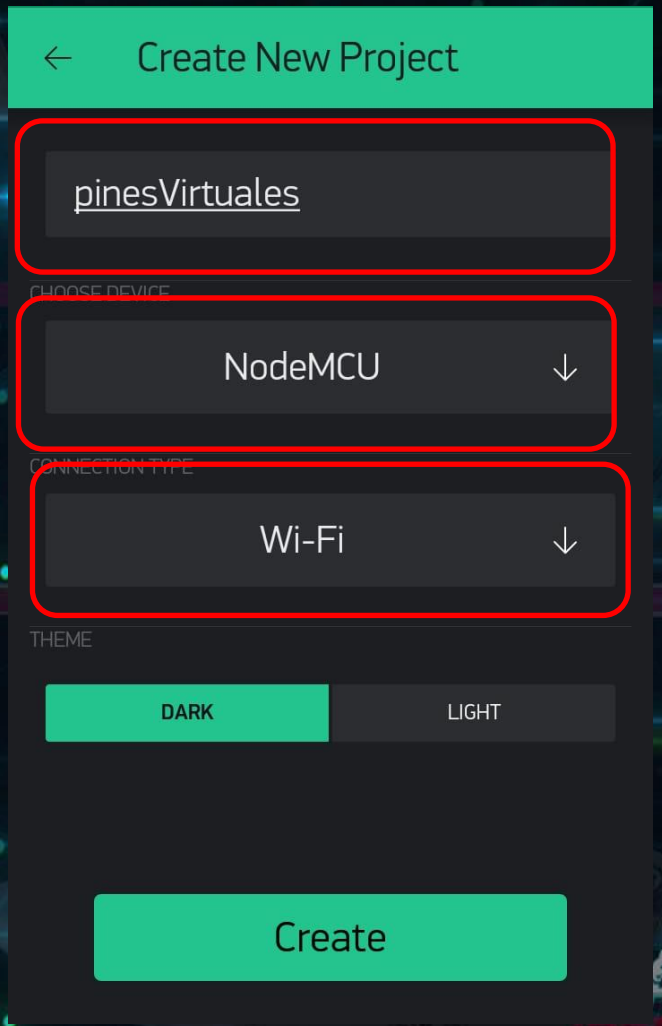


PINES VIRTUALES BLYNK

Los pines virtuales son canales para enviar datos. Estos pines no tienen una representación física.

PINES VIRTUALES BLYNK





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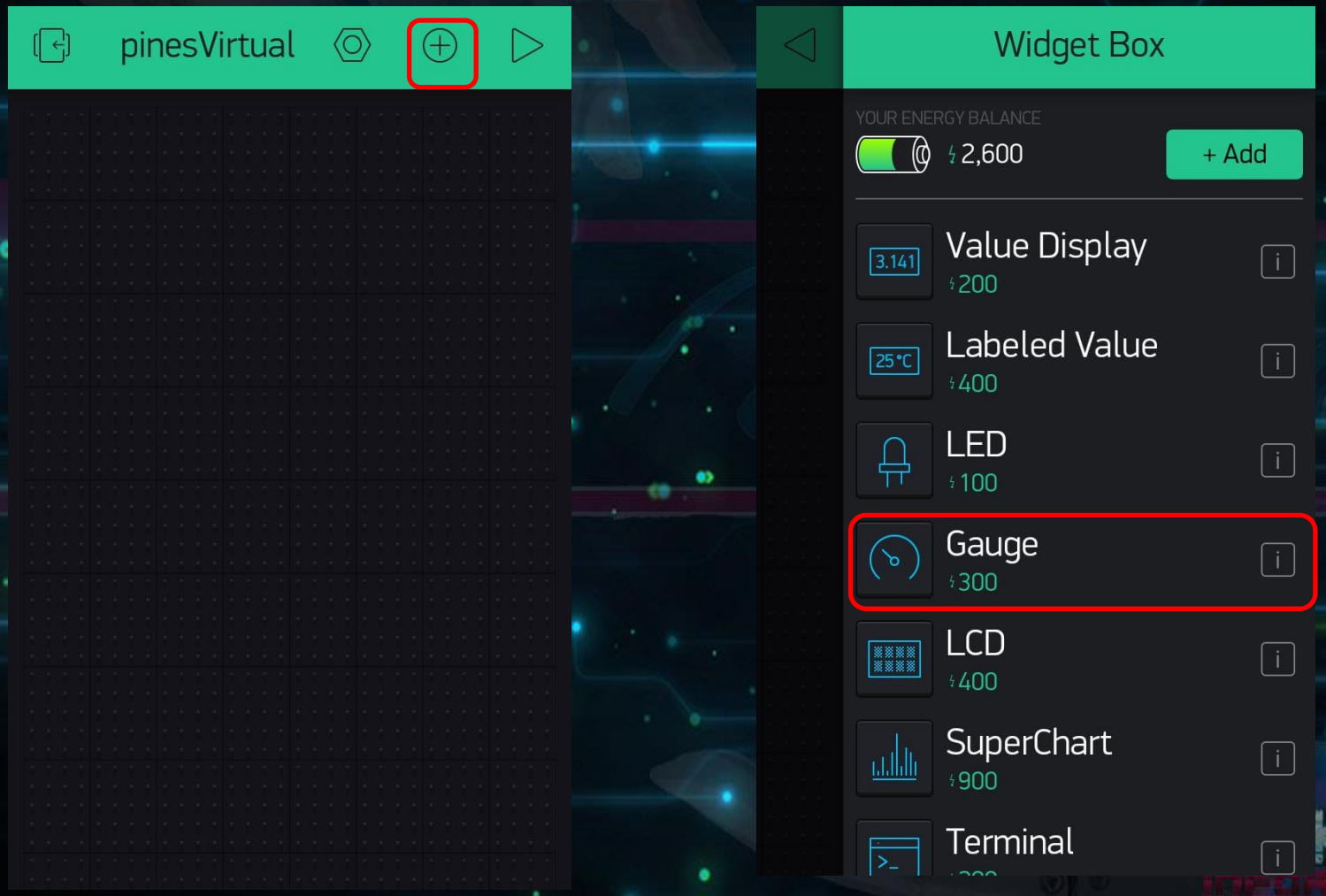

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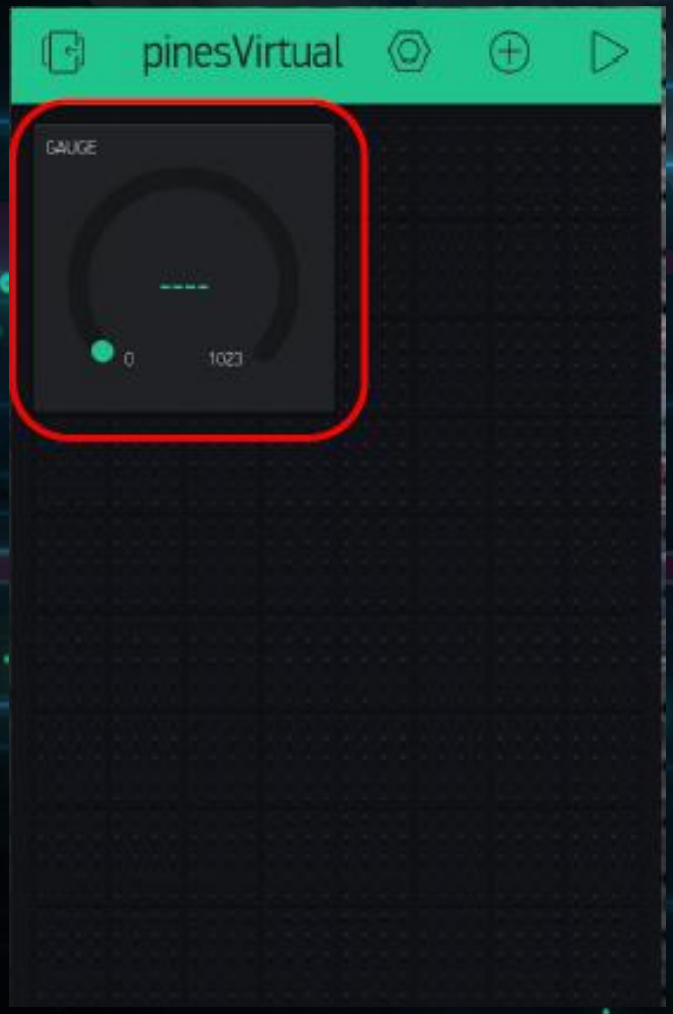

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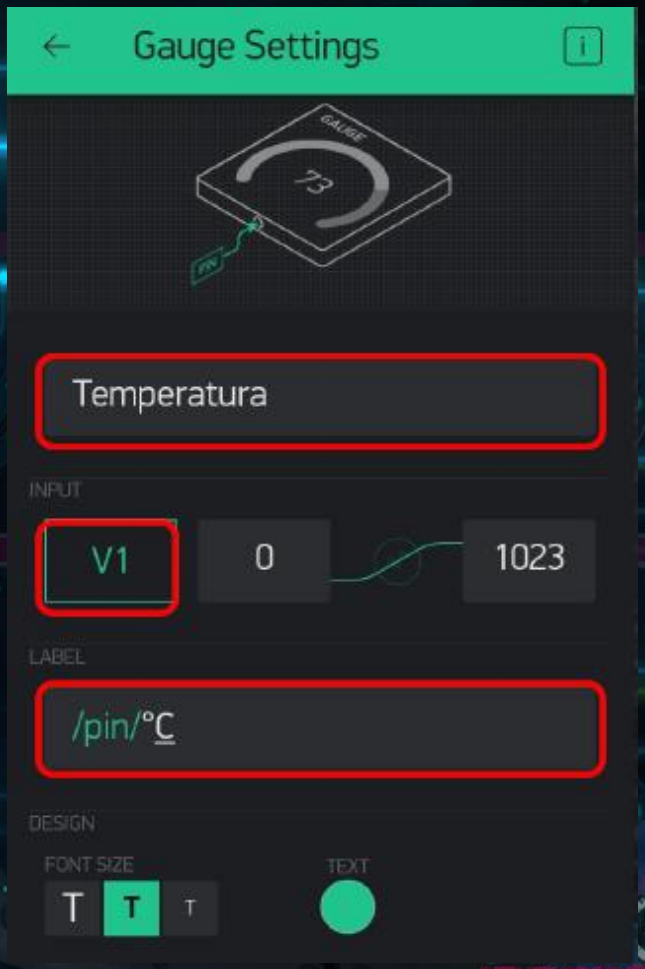

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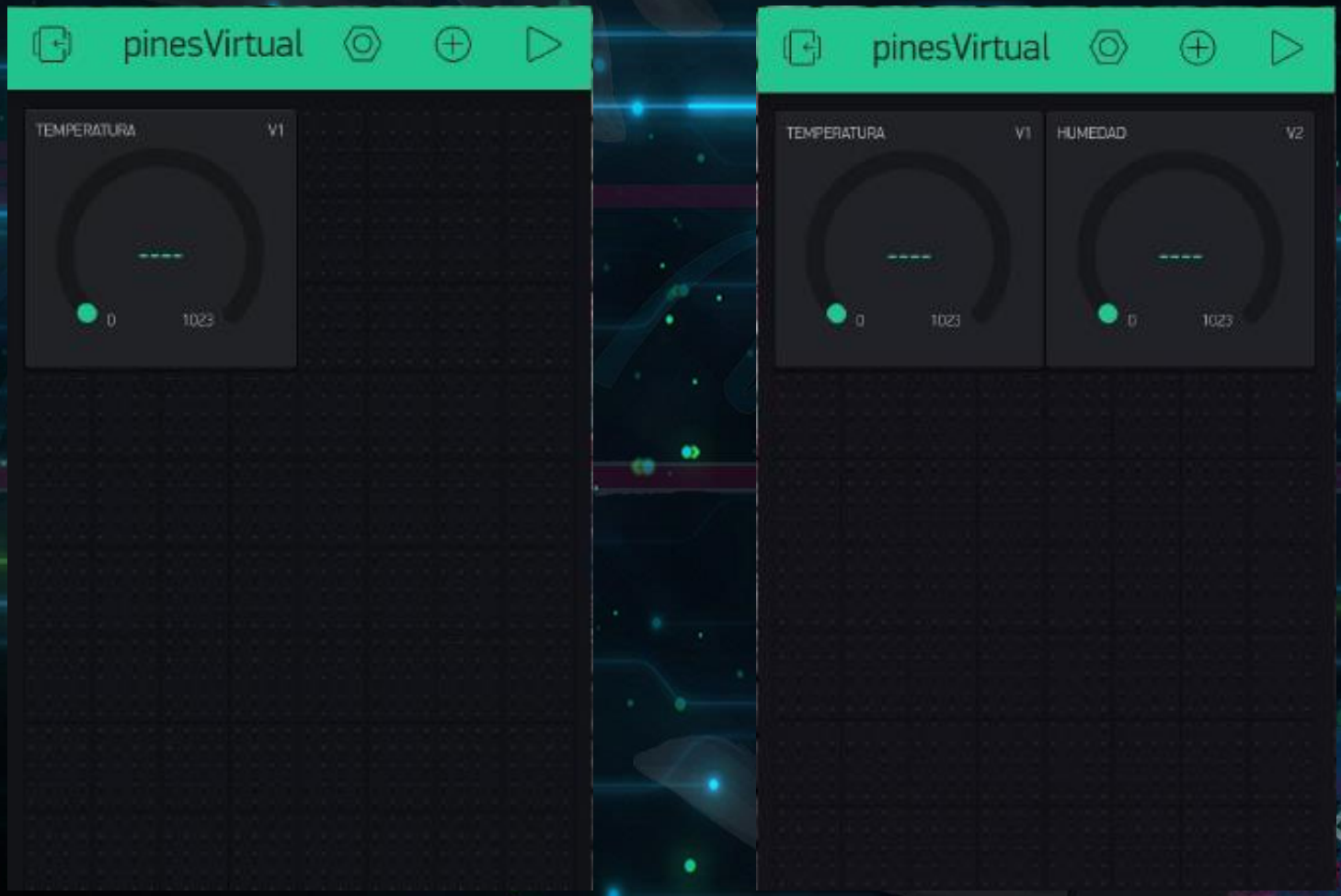
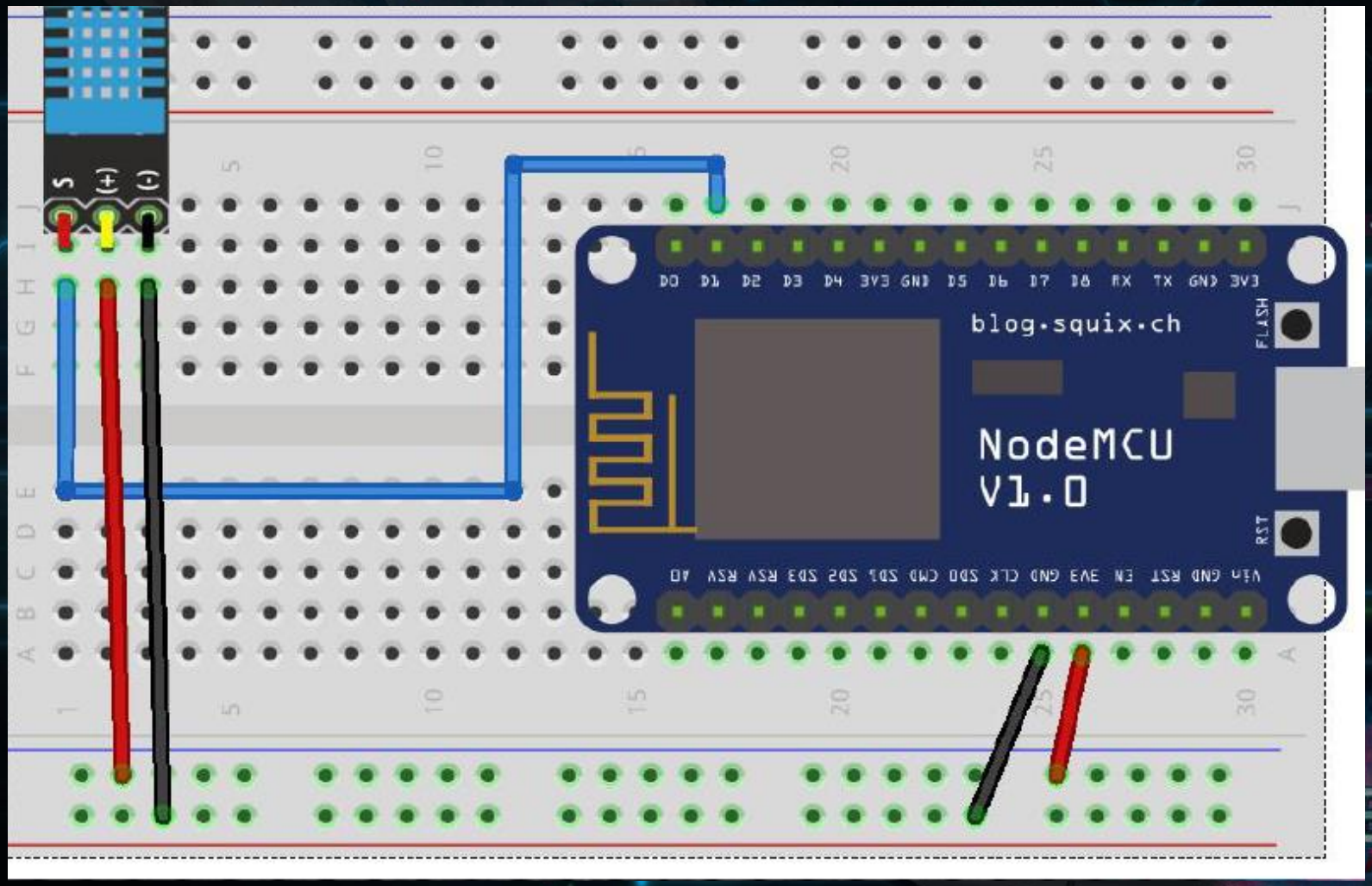


PINES VIRTUALES BLYNK



CÓDIGO PINES VIRTUALES BLYNK

pruebaDhtBlynk

```
#define BLYNK_PRINT Serial
#include <ESP8266WiFi.h>
#include <BlynkSimpleEsp8266.h>
#include <ESP8266WiFi.h>
#include <DHT.h>
#define DHTPIN D4 //pin donde conectamos el sensor
#define DHTTYPE DHT22 // iniciamos el dht11
DHT dht(DHTPIN, DHTTYPE);

const char auth[]="6                                    ";
const char* ssid ="          ";//red WiFi
const char* pass="         ";//contraseña de la red WiFi

void setup() {
  // put your setup code here, to run once:
  Serial.begin(115200);
  dht.begin();
  Blynk.begin(auth,ssid,pass);
}
```

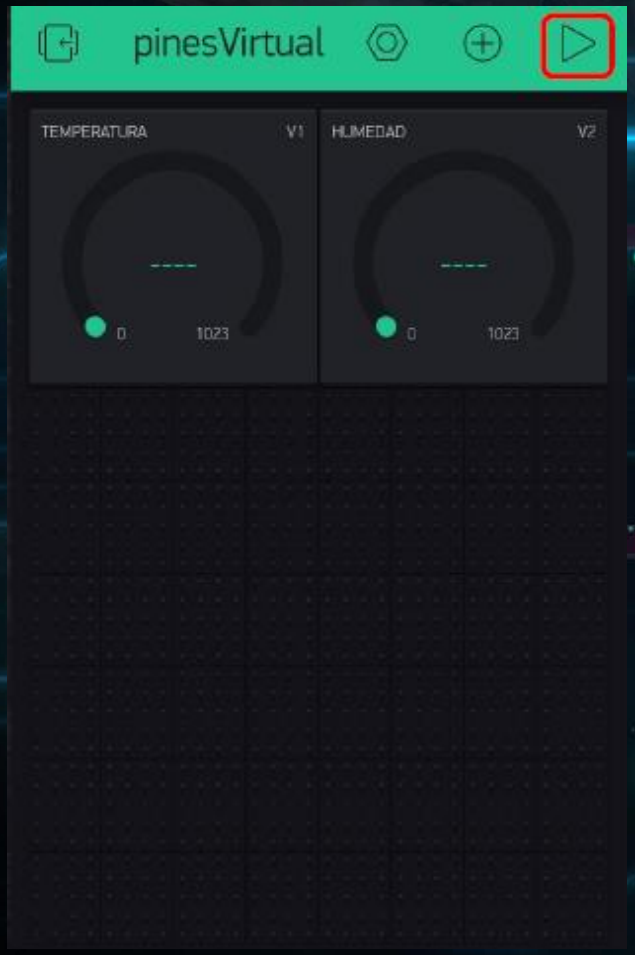
CÓDIGO PINES VIRTUALES BLYNK

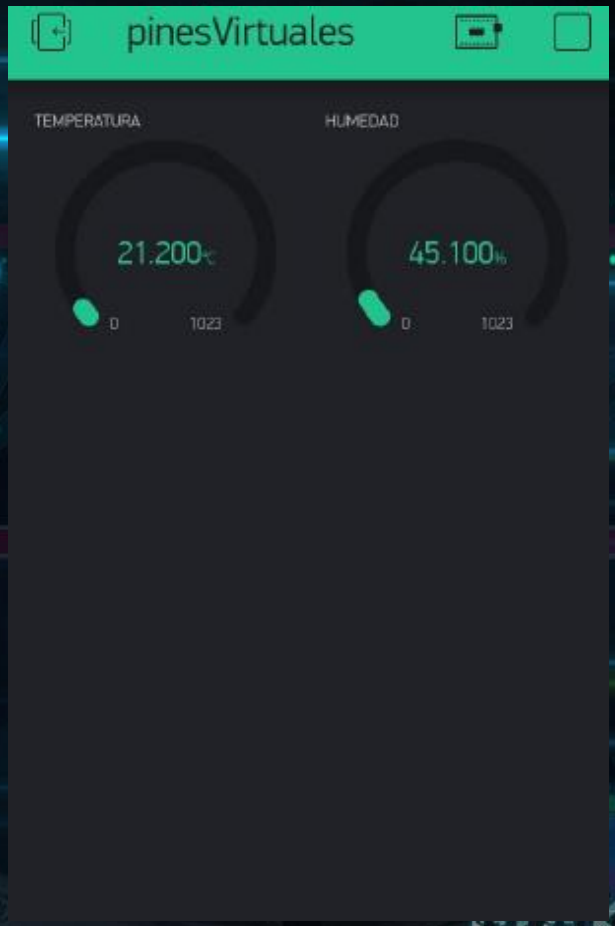
```
void loop() {
  // put your main code here, to run repeatedly:
 // lectura del sensor de temperatura y humedad
 float t=dht.readTemperature();
 float h=dht.readHumidity();

 Blynk.virtualWrite(V1,t);
 Blynk.virtualWrite(V2,h);

 Serial.println("Temperatura : ");
 Serial.println(t);
  Serial.println("Humedad: ");
 Serial.println(h);
}
```

PINES VIRTUALES BLYNK





PINES VIRTUALES BLYNK

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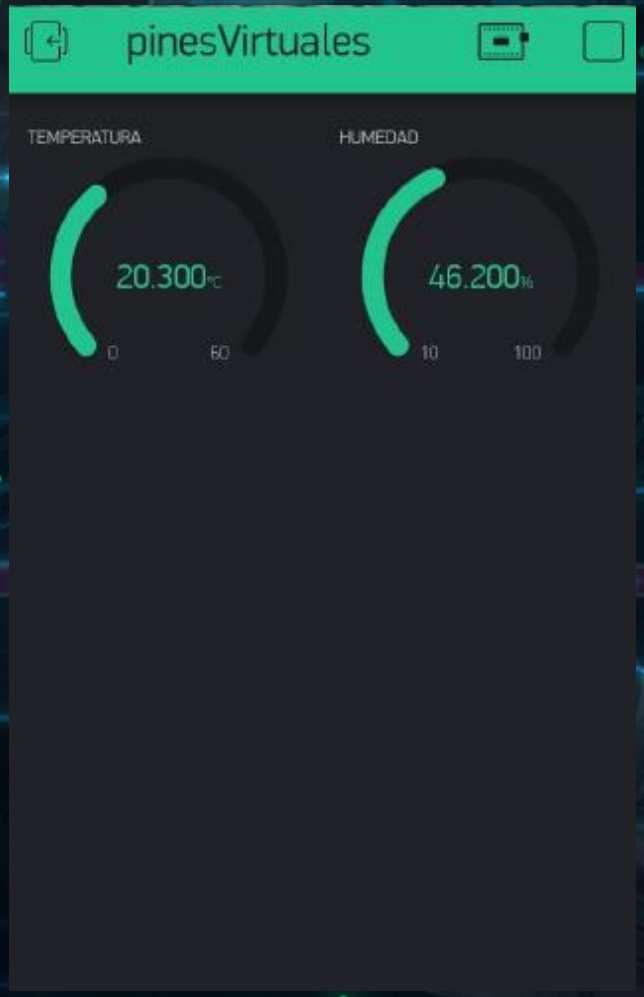
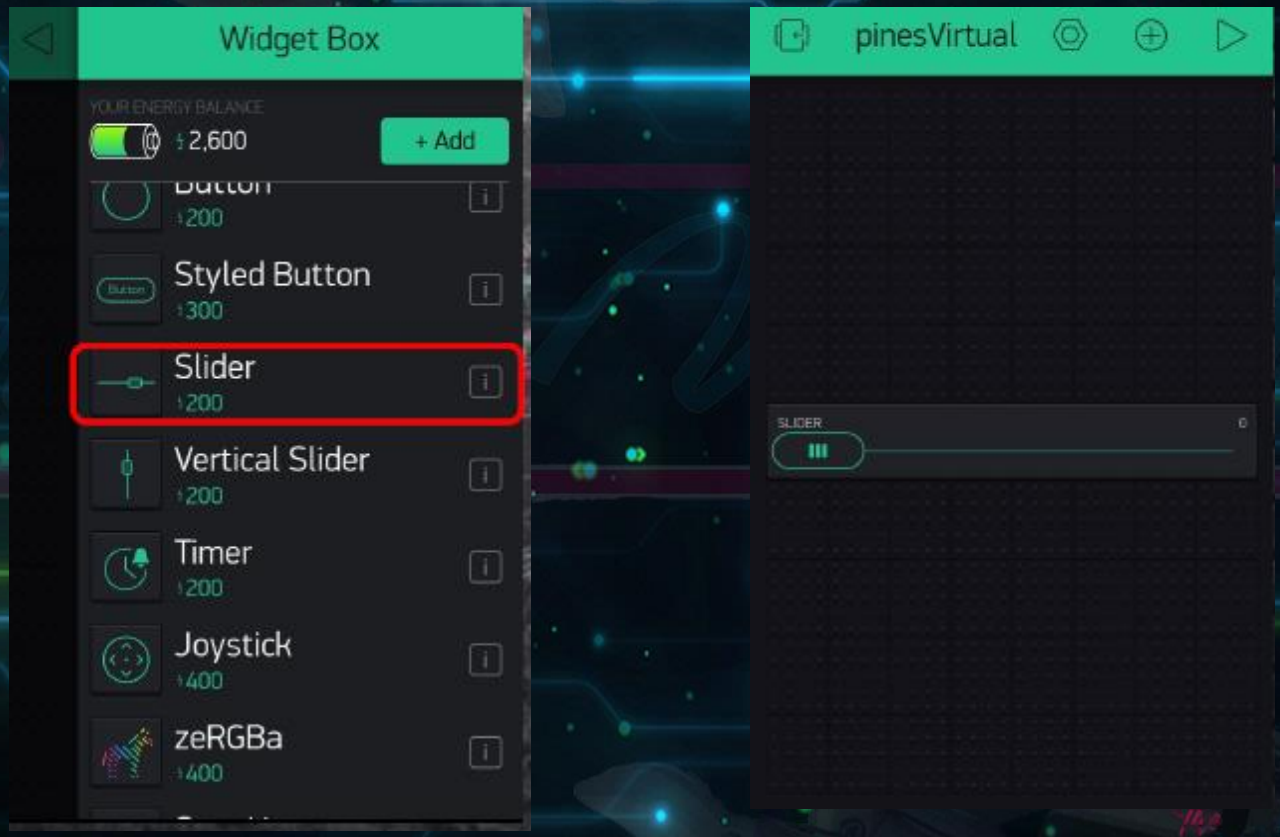
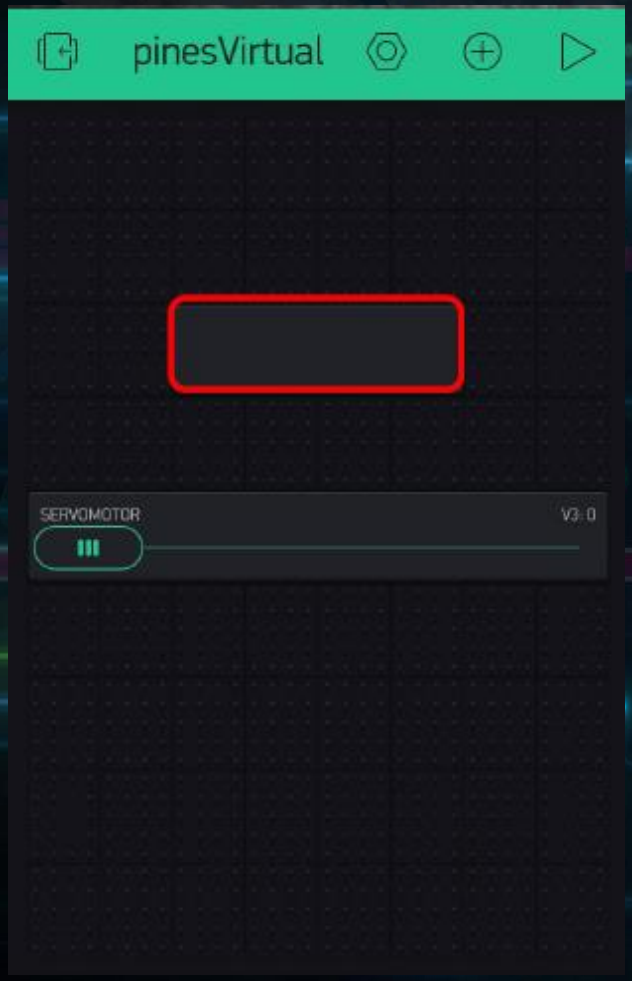


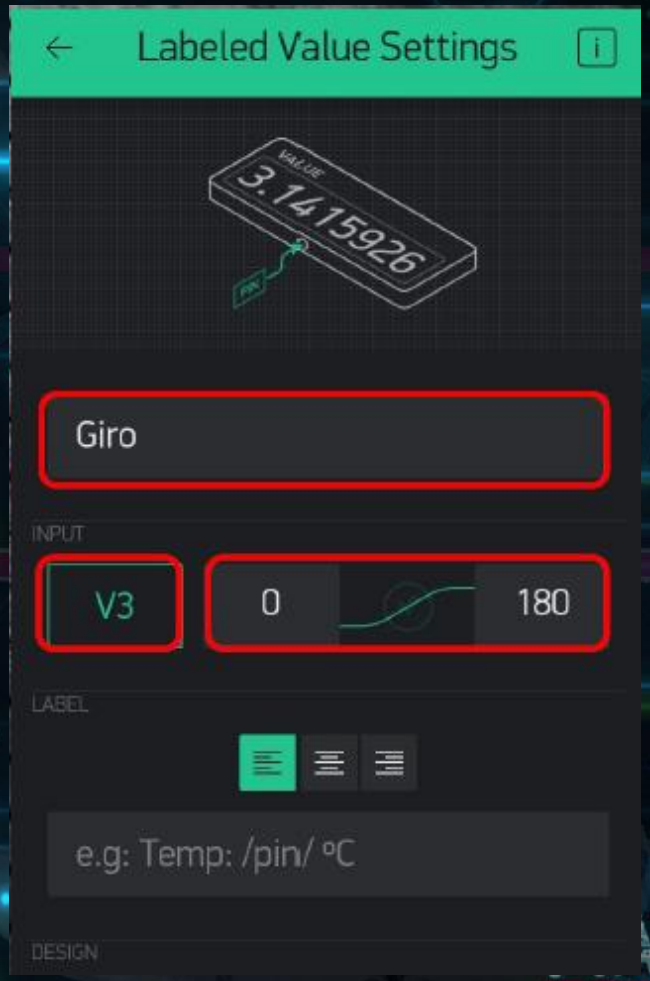
SERVOMOTOR - BLYNK



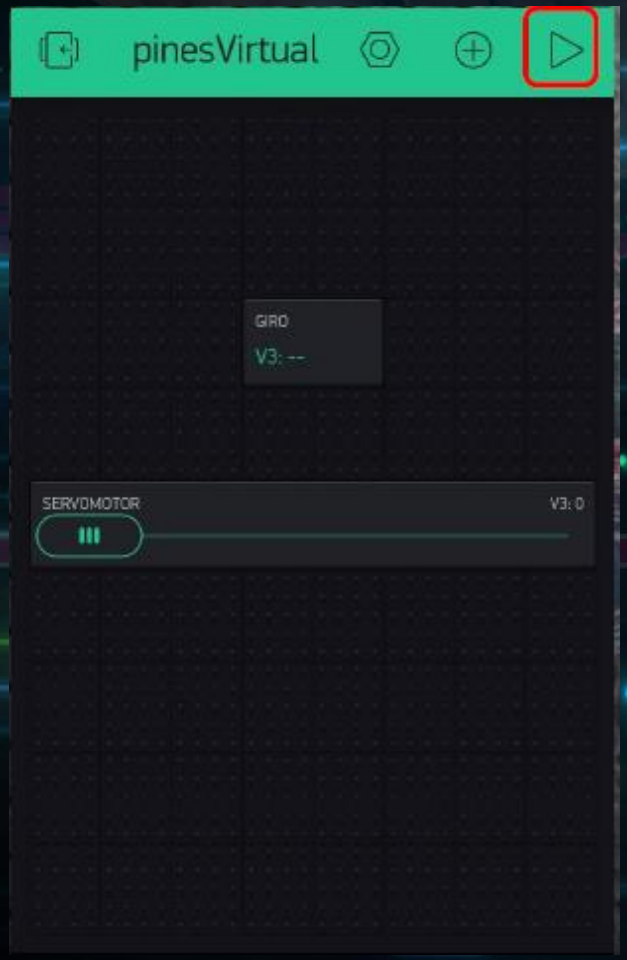
SERVOMOTOR - BLYNK

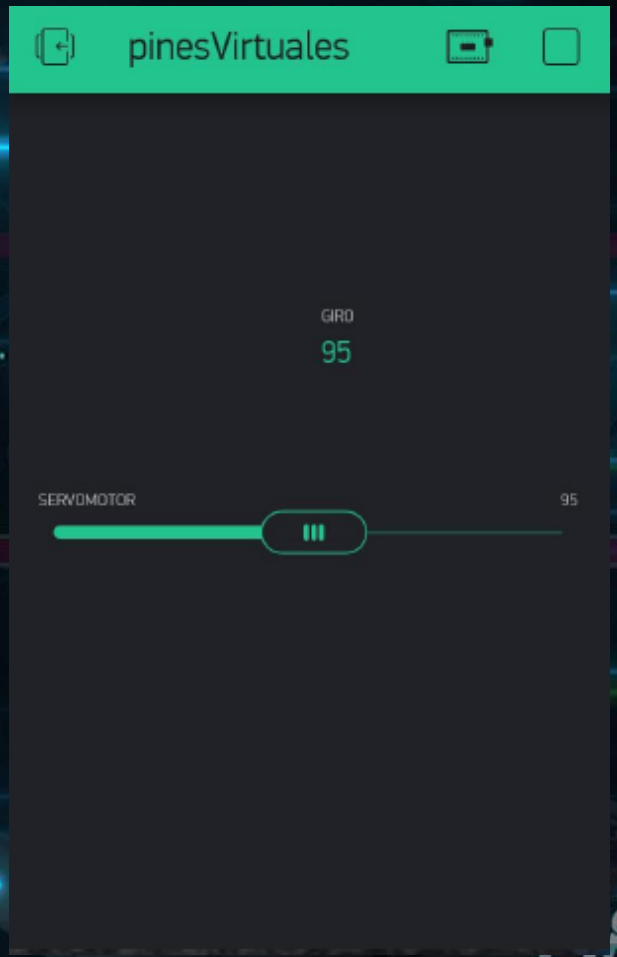
SERVOMOTOR - BLYNK



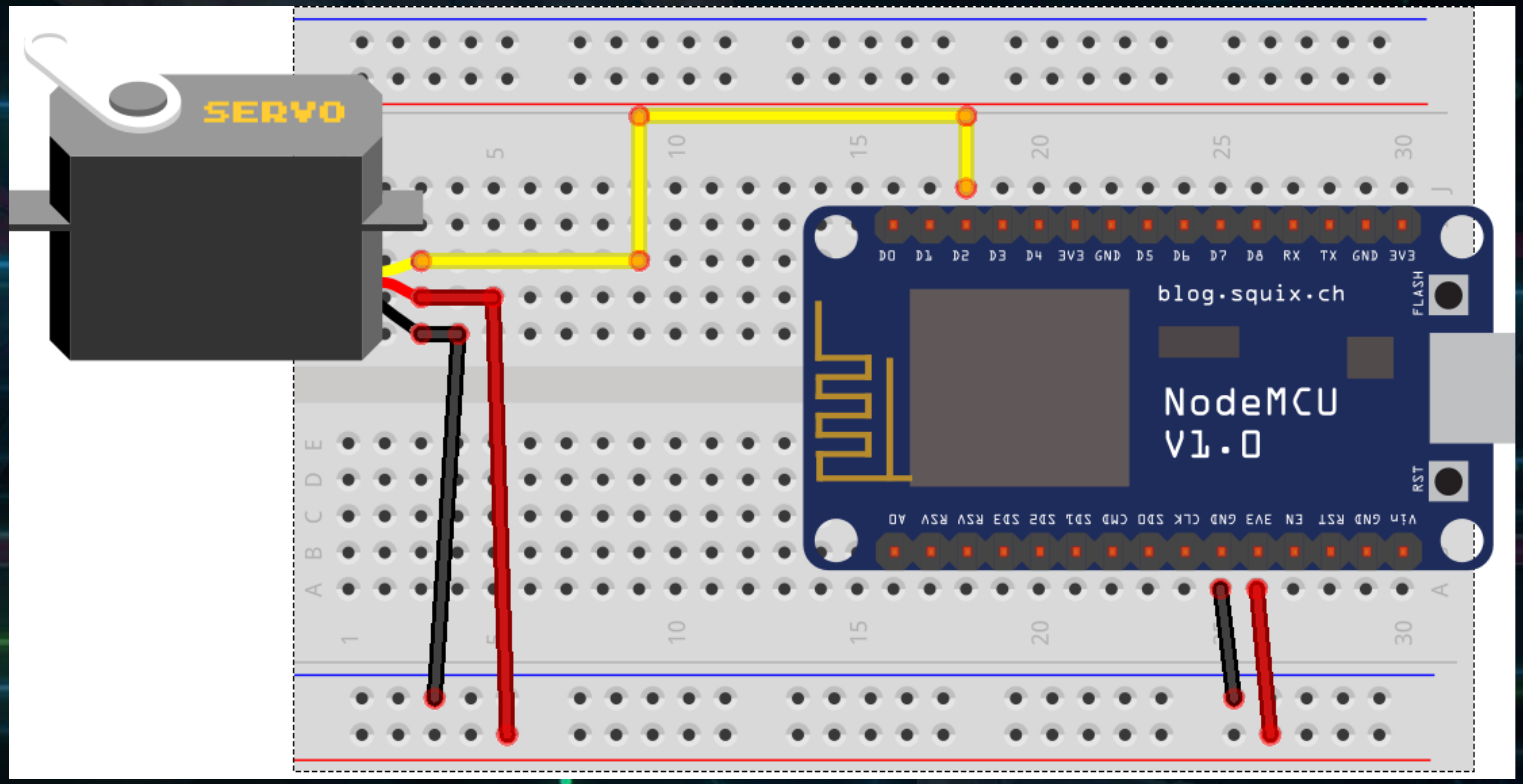


SERVOMOTOR - BLYNK





ESQUEMA


SERVO
D0 D1 D2 D3 D4 3V3 GND D5 D6 D7 D8 RX TX GND 3V3
blog.squix.ch
FLASH
NodeMCU
V1.0
RST
A B C D E
J
A
1
5
10
15
20
25
30

CÓDIGO SERVOMOTOR BLYNK

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

Servo servo;
const char auth[]="6dc555cca93642258e375dd44d931e11";
const char* ssid ="ZTE-bdb669";//red WiFi
const char* pass="ec8a4cbd";//contraseña de la red WiFi

void setup() {
  // put your setup code here, to run once:
  Serial.begin(115200);
  Blynk.begin(auth,ssid,pass);
  servo.attach(D2);
}
void loop() {
 Blynk.run();
}

BLYNK_WRITE(V3){
  servo.write(param.asInt());
}
```

BONUS

- **Manejo de notificaciones (email).**
- **Manejo de notificaciones (alarma).**

GRACIAS