

06-1 Blynk

Controlling your Bone with Your Device

Day 06-1

Assignment:

- ▶ HW 07, Due Monday

Today's Topics:

- ▶ Projects
- ▶ Blynk
- ▶ IFTTT

Blynk - Intro

- ▶ <http://www.blynk.cc/>
- ▶ 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.
- ▶ It's really simple to set everything up and you'll start tinkering in less than 5 mins.
- ▶ Blynk is not tied to some specific board or shield. Instead, it's supporting hardware of your choice. Whether your Arduino or Raspberry Pi is linked to the Internet over Wi-Fi, Ethernet or this new ESP8266 chip, Blynk will get you online and ready for the **Internet Of Your Things**



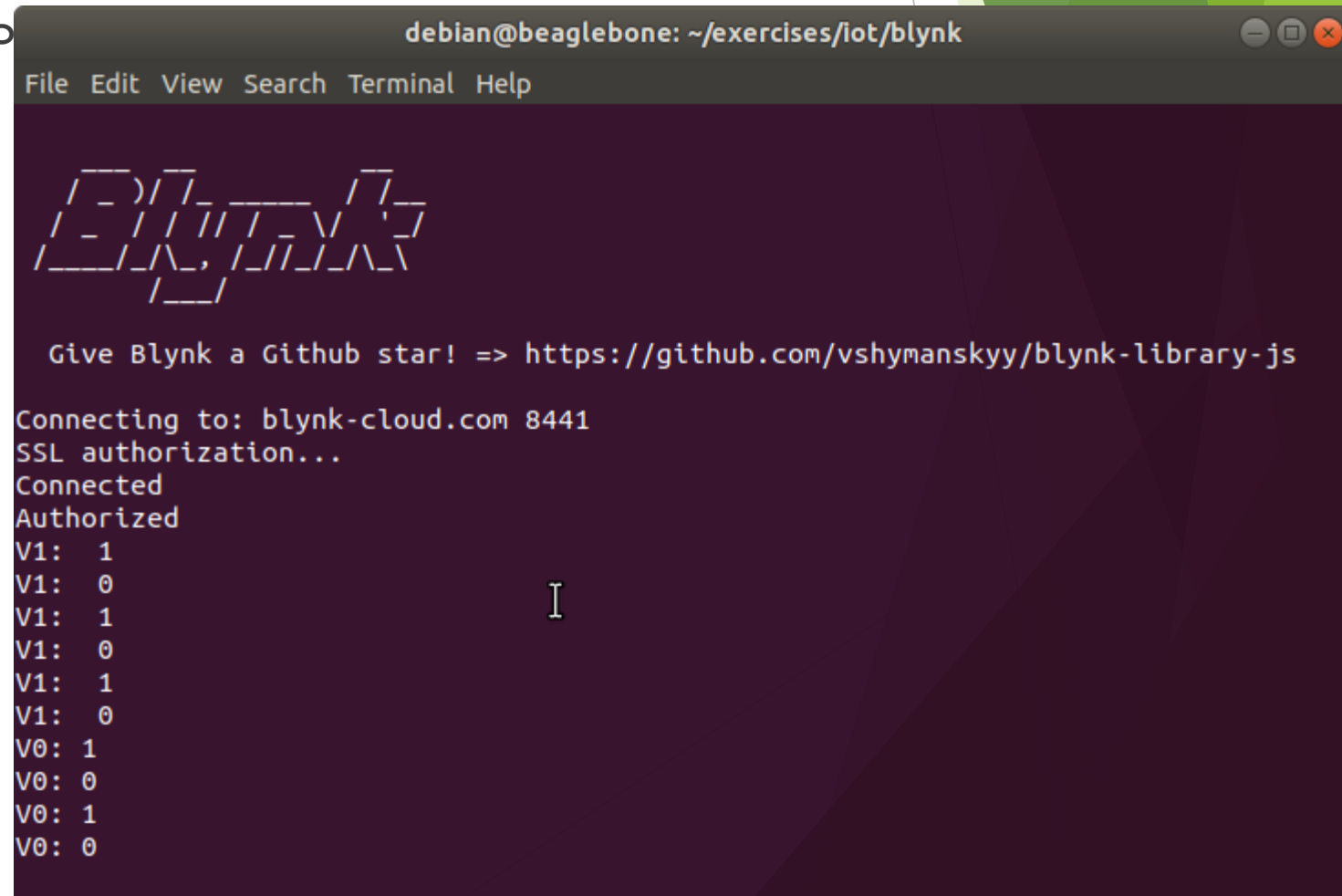
Installing Blynk on Your Device

- ▶ Download Blynk for iOS or Android (<http://www.blynk.cc/getting-started/>)
- ▶ Get Auth Token
 - ▶ Create a new account in Blynk App.
 - ▶ Create a New Project. Then choose the board and connection you will use.
 - ▶ After the project was created, we will send you Auth Token over email.
 - ▶ Check your email inbox and find the **Auth Token**

Installing Blynk on the Bone

Package Manager for
JavaScript

- ▶ bone\$ `sudo npm install -g on`
- ▶ bone\$ `cd exercises/iot/blynk`
- ▶ bone\$ `./leds.js`



```
debian@beaglebone: ~/exercises/iot/blynk
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Give Blynk a Github star! => https://github.com/vshymanskyi/blynk-library-js

Connecting to: blynk-cloud.com 8441
SSL authorization...
Connected
Authorized
V1: 1
V1: 0
V1: 1
V1: 0
V1: 1
V1: 0
V0: 1
V0: 0
V0: 1
V0: 0
```

leds.js

```
#!/usr/bin/env node  
  
// From Blinks various LEDs  
  
const Blynk = require('blynk-library');  
const b = require('bonescript');  
  
const LED0 = 'USR3';  
const button = 'P9_25';  
  
b.pinMode(LED0, b.OUTPUT);  
b.pinMode(button, b.INPUT);
```

leds.js - 2

```
var AUTH = 'dc1c083949324ca28fbf393231f8cf09';  
var blynk = new Blynk.Blynk(AUTH);  
var v0 = new blynk.VirtualPin(0);  
var v10 = new blynk.WidgetLED(10);  
  
v0.on('write', function(param) {  
    console.log('V0:', param[0]);  
    b.digitalWrite(LED0, param[0]);  
});
```

leds.js - 3

```
v10.setValue(0);    // Initially off

b.attachInterrupt(button, toggle, b.CHANGE);

function toggle(x) {
    console.log("V10: ", x.value);
    x.value ? v10.turnOff() : v10.turnOn();
}
```


Homework 7

- ▶ Due Monday
- ▶ Add a slider to Blynk
- ▶ Create a project template