Cloud, APIs and Alerts > Bolt Python Library

Checking Device Status and Restarting the Device

In the previous section, we learned about setting up and installation of boltiot Python library. In this topic, we will learn about the usage of Bolt Python library in checking the device status and restarting the device. Make sure you have installed the Bolt Python library as discussed in the previous section otherwise you will not be able to run the code in this chapter. Also, save your API key and device name from Bolt Cloud somewhere. Now Let's start -

1. Checking Device Status

First login to your Ubuntu server using Putty and create a file using nano editor. You can assign any name to the file but for simplicity of this tutorial, we will name it as "device_status.py".

For example -

```
sudo nano device_status.py
```

Type the below code in your file. We will learn what the code does line by line in the section below.

```
from boltiot import Bolt
api_key = "XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX"
device_id  = "BOLTXXXXXX"
mybolt = Bolt(api_key, device_id)
response = mybolt.isOnline()
print (response)
```

First, we need to import the Bolt Class from the boltiot python module. This is done in line 1. Next, We need to provide the API key and device ID to the Bolt Class so that we can control our device. For this, we are creating and assigning a variable to hold the API key in line 2. In line 3, we have created and assigned a variable to hold the device ID. You can find your device ID and API key (https://cloud.boltiot.com/api_credentials) from your Cloud dashboard. The Device ID will be similar to something like BOLTXXXXX where XXXXX are numbers. In the fourth line, we are initializing the Bolt class with our API key and device ID. In the fifth line, we are calling the "isOnline()" function to know if the device is online or offline. In the last line, we are printing the response of the "isOnline()" function. This will tell us if the Bolt device is online or offline along with the time when the device was online/offline respectively.

Now save the file and run the Python file.

```
sudo python3 device_status.py
```

If the device is online then it will print the following message.

```
{"success": 1, "value": "online", "time": "Mon 2018-06-18 03:27:40 UTC"}
```


and if the device is offline then it will print the following message.

```
{"success": 1, "value": "offline", "time": "Mon 2018-06-11 19:14:12 UTC"}
```

2. Restarting the bolt device

You can restart your bolt device using Bolt Cloud API. Follow these instructions to restart your bolt device using Bolt Python library. Before you start this experiment, your device should be online and linked to your Bolt cloud account.

First login to your Ubuntu server using Putty and create a file using nano editor. You can assign any name to the file but for simplicity of this tutorial, I am assigning a simple file name.

For example -

```
sudo nano device_control.py
```

and type the below code in your file. I will explain the code line by line in the section below.

```
from boltiot import Bolt
api_key = "XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX"
device_id  = "BOLTXXXXX"
mybolt = Bolt(api_key, device_id)
response = mybolt.restart()
print (response)
```

In the first line, we are importing the Bolt class from the boltiot module. In the second line, we are assigning API Key to api_key variables, You will find your API details from bolt cloud https://cloud.boltiot.com/api_credentials and in the third line, we are assigning Device id to device_idvariable. You will find your device id on your Bolt Cloud dashboard. It will be something like BOLTXXXXX where the XXXXX are numbers. In the fourth line, we are passing api_key and device_id to Bolt class as constructor arguments and it will return an instance, I have named it as mybolt. And in the fifth line, I am calling restart() method using mybolt instance to restart the bolt device.

Now save the file and run the Python file.

```
sudo python3 device_control.py
```

and if the device restarted successfully then it will print the below message.

```
{"success": "1", "value": "Restarted"}
```

In the next section, we will learn about controlling the led using Bolt Python library.

