

SmartBridge Externship Program

Internet of Things

Assignment 4

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Develop a mobile application that takes the user input and sends it to IoT device (python code). print the received data in python shell. Keep a text box to accept the user input. Integrate a submit button. Whenever user enters the text input in text box and clicks the button the data should be sent to IBM cloud using URL(HTTP API).

Code:

```
import wiotp.sdk.device
import time
import random

myConfig = {
    "identity": {
        "orgId": "hhqymq",
        "typeId": "ONEDevice",
        "deviceId": "123"
    },
    "auth": {
        "token": "12345678"
    }
}

def myCommandCallback(cmd):
    print("Message received from User: %s" % cmd.data['control'])

client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
client.connect()
```

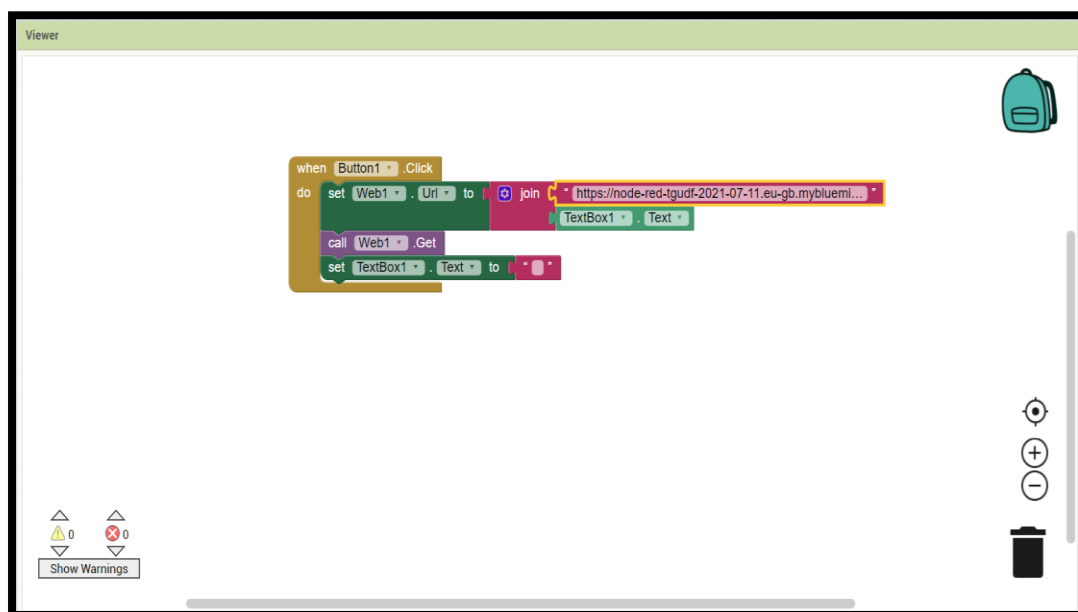
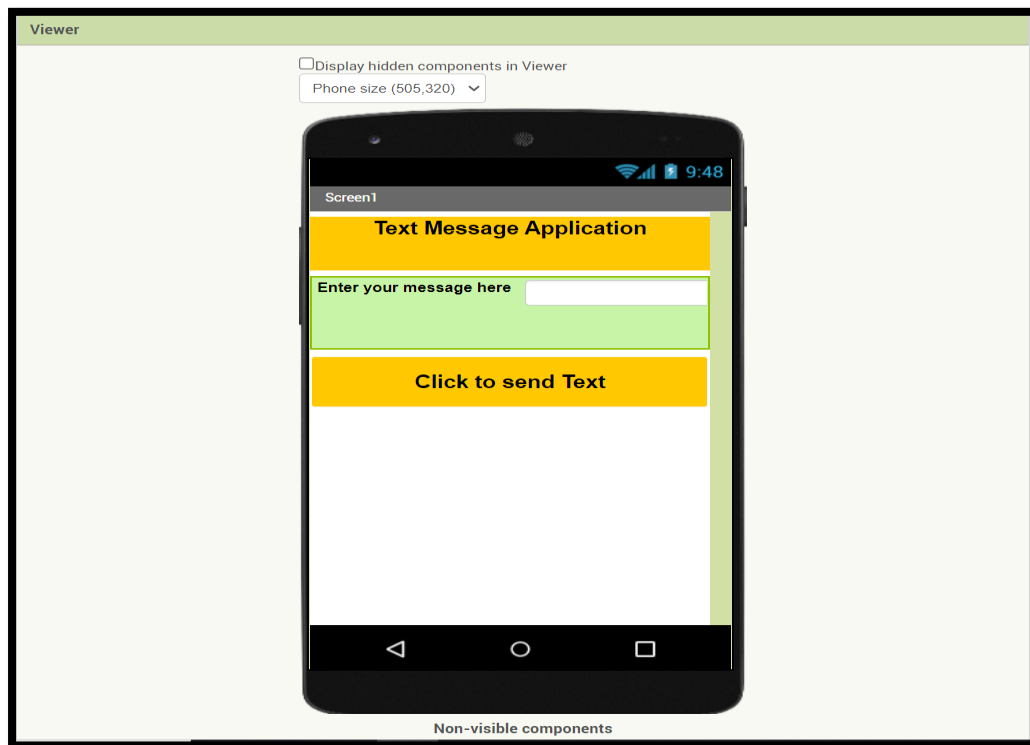
while True:

 client.commandCallback = myCommandCallback

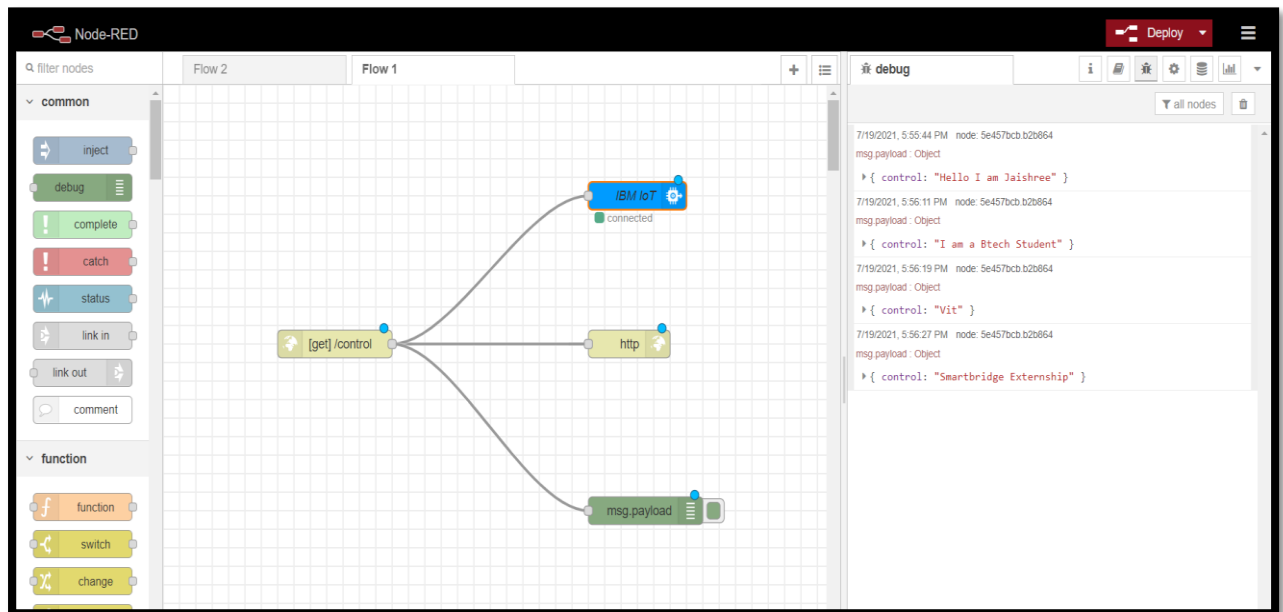
 time.sleep(2)

client.disconnect()

Design:



Output:



The image shows a Python shell window and a Node-RED debug console. The Python shell window displays the output of a script named 'sms.py', which connects to a device and receives four messages. The Node-RED debug console on the right shows the corresponding JSON payloads for these messages.

```
Python 3.9.6 (tags/v3.9.6:db3ff76, Jun 28 2021, 15:26:21) [MSC v.1929 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:\Users\DELL\Desktop\sms.py =====
2021-07-19 17:54:48,525 wiotp.sdk.device.client.DeviceClient INFO Connecte
d successfully: d:hhgymq:ONEDevice:123
Message received from User: Hello I am Jaishree
Message received from User: I am a Btech Student
Message received from User: Vit
Message received from User: Smartbridge Externship
|
```

Debug Console Output:

Timestamp	Node ID	msg.payload
7/19/2021, 5:55:44 PM	5e457bcb.b2b864	{ control: "Hello I am Jaishree" }
7/19/2021, 5:56:11 PM	5e457bcb.b2b864	{ control: "I am a Btech Student" }
7/19/2021, 5:56:19 PM	5e457bcb.b2b864	{ control: "Vit" }
7/19/2021, 5:56:27 PM	5e457bcb.b2b864	{ control: "Smartbridge Externship" }

Mobile Application Screenshot:

