

VIT-IOT-INDUSTRY CERTIFICATE EXTERNSHIP PROGRAM

ASSIGNMENT-4

NAME: KESHANAPALLI YASHWANTH CHOWDARY

MAIL ID: yashwanth.chowdary2018@vitstudent.ac.in

Assignment-4:

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).

Python Code:

```
import wiotp.sdk.device
import time
import random
myConfig = {
    "identity": {
        "orgId": "d9cbnt",
        "typeId": "FirstDevice",
        "deviceId": "14831"
    },
    "auth": {
        "token": "SaiVardhan14831"
    }
}

def myCommandCallback(cmd):
    print("Message received from IBM IoT Platform: %s" % cmd.data['command'])
    #m=cmd.data['command']

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

while True:|
    client.commandCallback = myCommandCallback
    time.sleep(2)
client.disconnect()
```

Fig.1Python code editor window



Fig2. Application UI

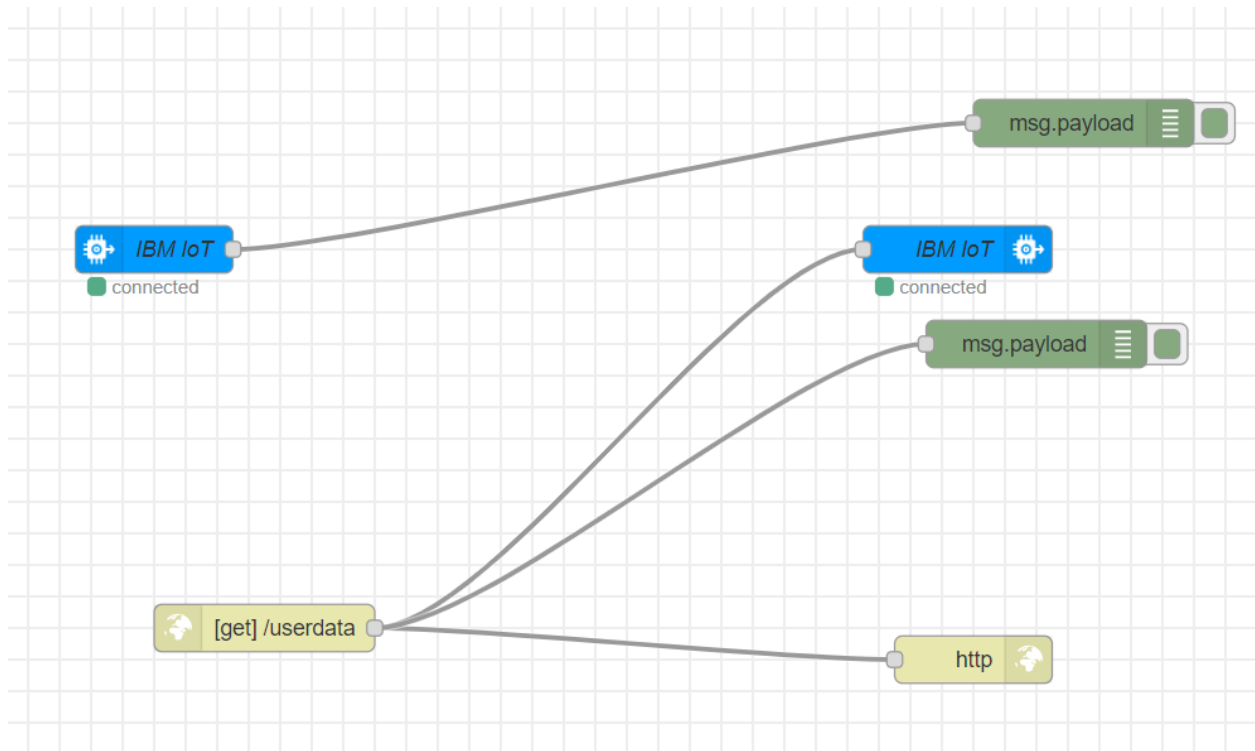


Fig3.Node Red flow chart → In this The IBM IoT Node connects the Device with python code

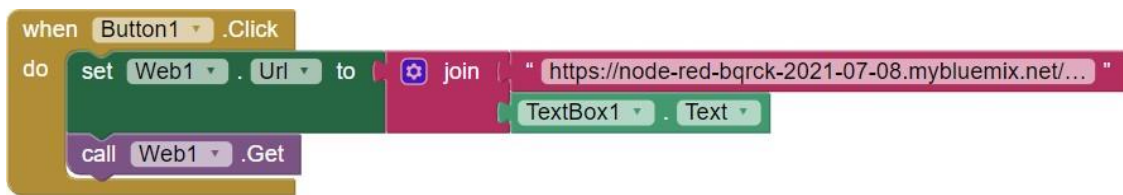


Fig.4. UI block logic

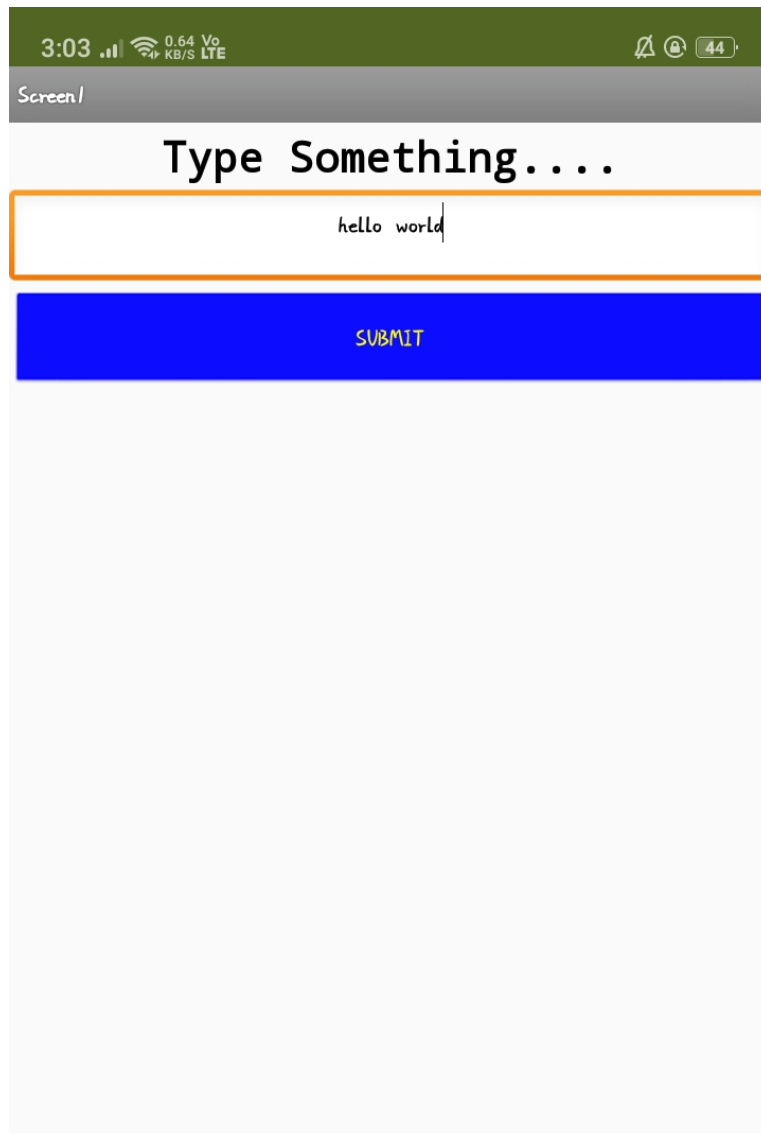


Fig5.User Input given from mobile

```

7/18/2021, 3:16:16 PM node: 5a87d33a.ef0cdc
msg.payload : Object
  ▶ { command : " hello world" }

7/18/2021, 3:16:17 PM node: e92d61ae.a9c68
iot-2/type/FirstDevice/id/14831/cmd/cmd/fmt/json :
msg.payload : Object
  ▶ { command : " hello world" }

```

Fig6.Data received successfully to the Node Red debug window

```

2021-07-18 15:21:31,430 wiotp.sdk.device.client.DeviceClient INFO Connecte
d successfully: d:d9cbnt:FirstDevice:14831
Message received from IBM IoT Platform: hello world
Message received from IBM IoT Platform: hello world
|

```

Fig.7. Python shell of Reciving Data