VIT-SMARTBRIDGE EXTERNSHIP PROGRAM

INTERNET OF THINGS

ASSIGNMENT-4

NAME: AMRITH SRIRAM

MAIL ID: amrith.sriram@gmail.com

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": "k1qr7q",

        "typeId": "RPI",

        "deviceId":"003"

    },

    "auth": {

        "token": "567567567"

    }

}


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()
```

Fig1. Application UI

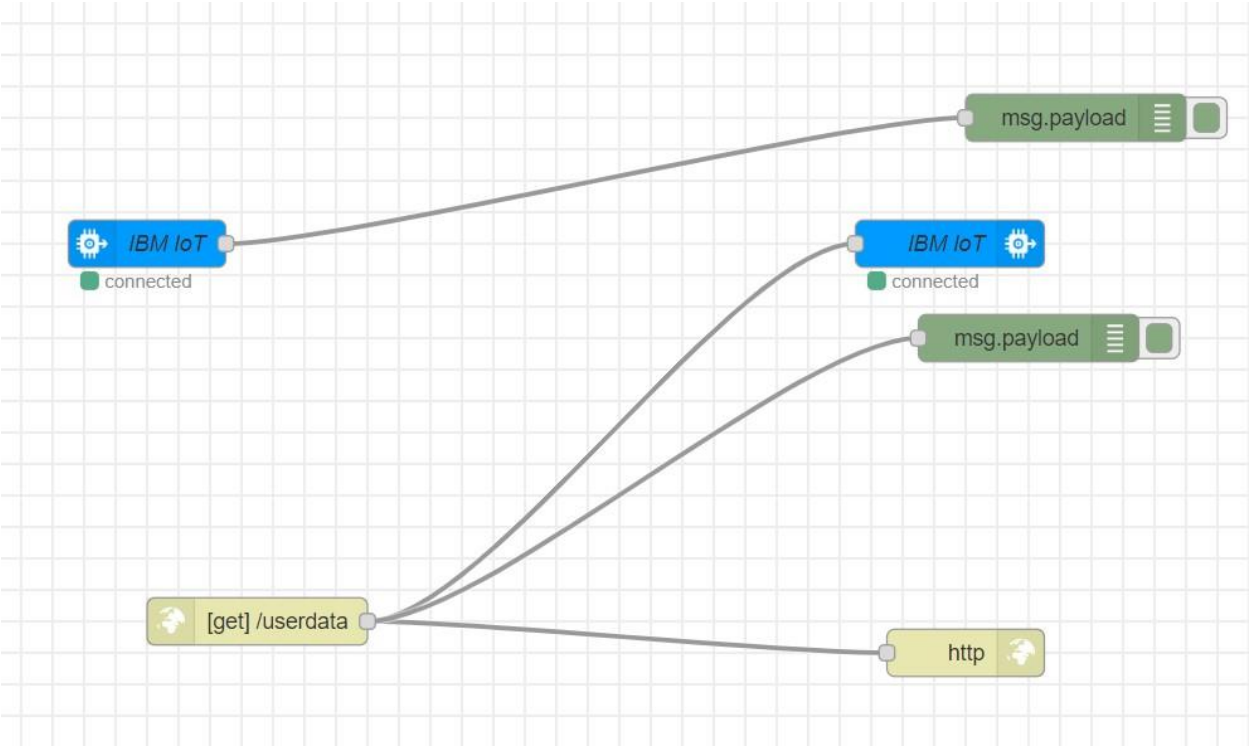

Fig2. Node Red flow chart → In this The IBM IoT Node connects the Device with python code

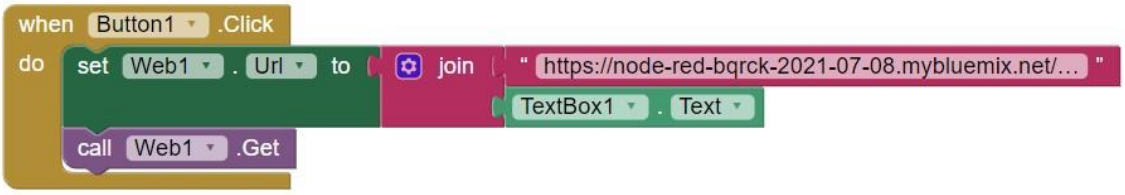

Fig.3. UI block logic

Fig4. User Input given from mobile

Fig5. 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.6. Python shell of Reciving Data