

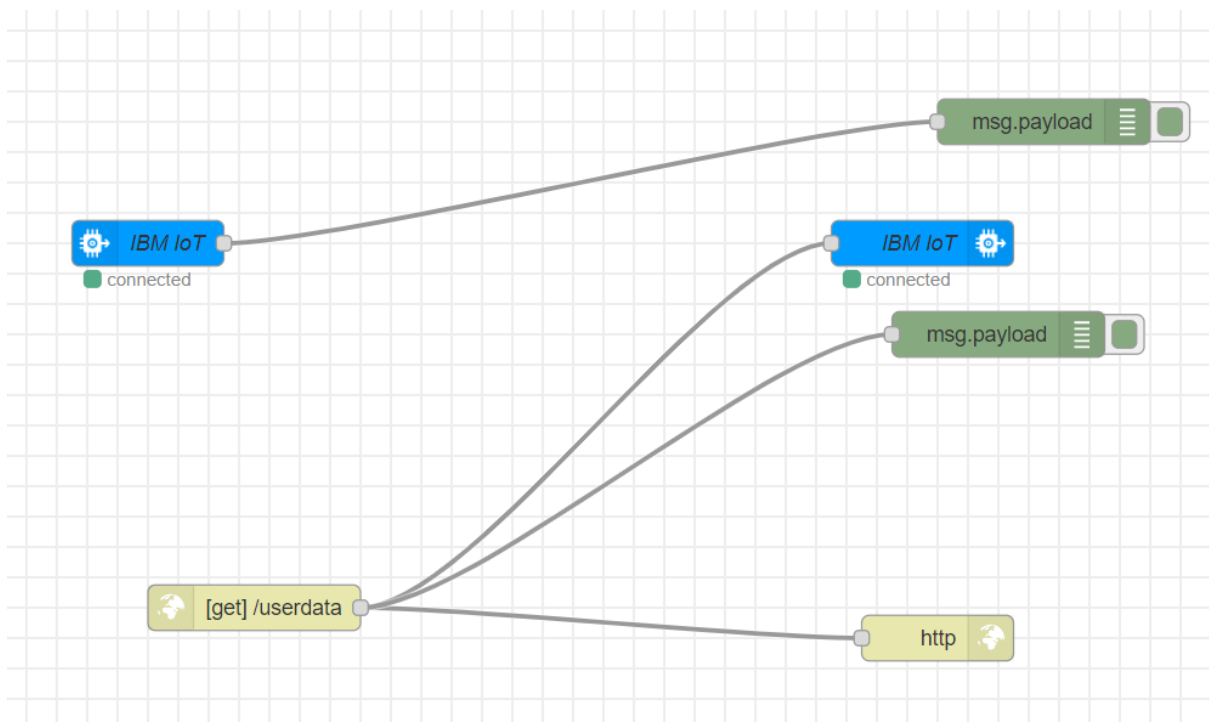
Siddhant Shenoy

IoT Externship Training

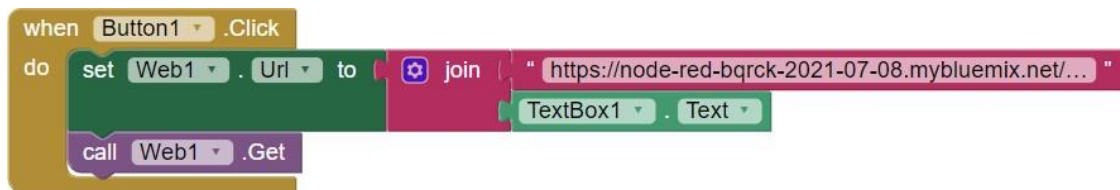
Assignment 4

Q) 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).

NODE-RED FLOW –



UI BLOCK –



CODE –

```
import wiotp.sdk.device
import time
import random
myConfig = {
    "identity": {
        "orgId": "lmw2gz",
        "typeId": "DevDelta",
        "deviceId": "9658"
    },
    "auth": {
        "token": "96582653"
    }
}

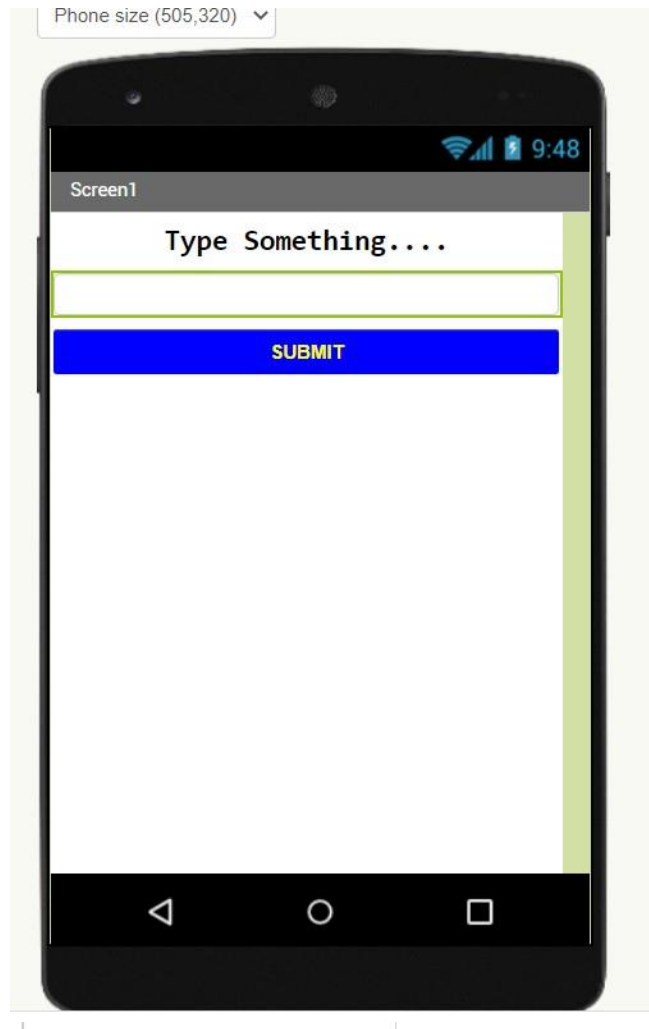
def myCommandCallback(cmd):
    print("Message received from IBM IoT Platform: %s" % cmd.data['command'])

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

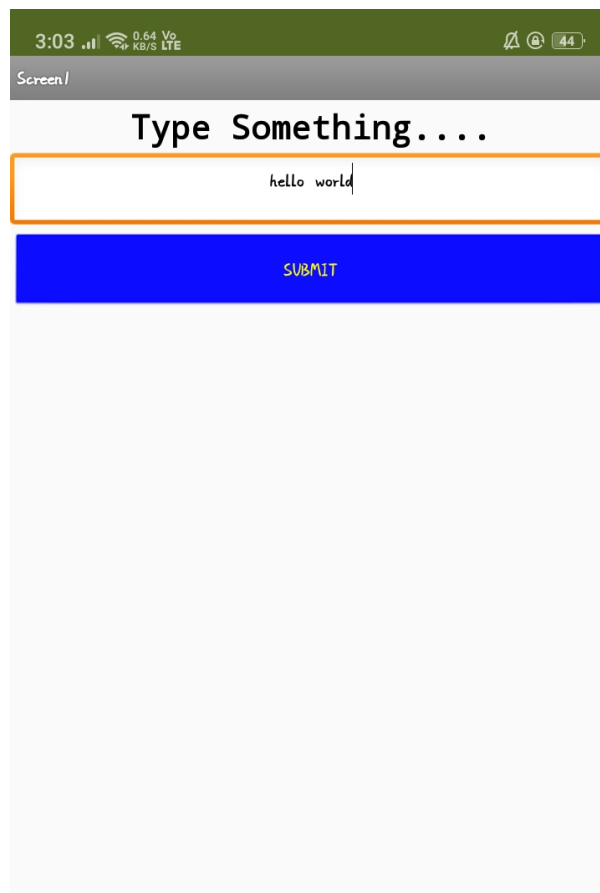
while True:
    client.commandCallback = myCommandCallback
    time.sleep(2)
client.disconnect()
```

OUTPUTS –

a) Application UI



b) User Input to the UI



c) Data Received in Node-RED

```
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" }
```

d) Data Received by Python Shell

```
ABINIT: C:\Users\devind\Desktop\salvadoran\enclonship\assignment0000.py
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
|
```