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:

```python
import wiotp.sdk.device
import time
import random
myConfig = {
    "identity": {
        "orgId": "0aaw8c",
        "typeId": "VITDevice",
        "deviceId":"12345"
    },
    "auth": {
        "token": "12345678"
    }
}

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()
```
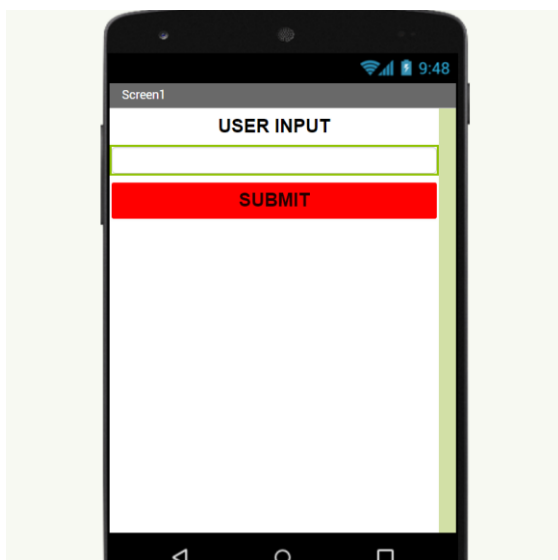
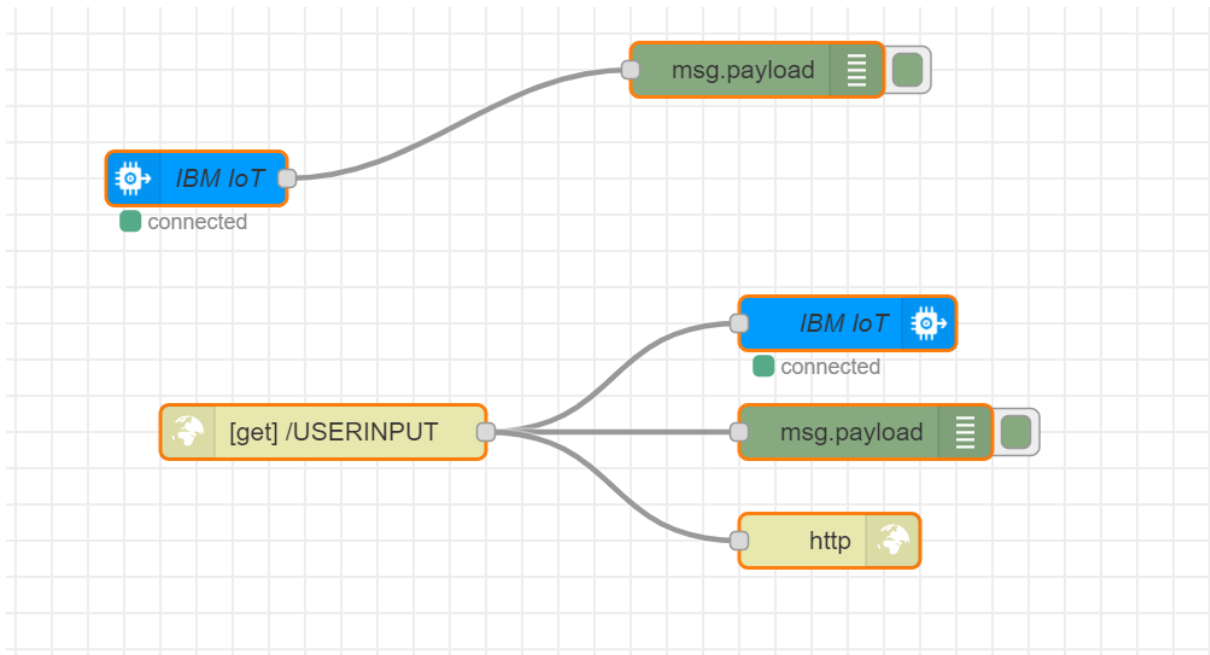import wiotp.sdk.device

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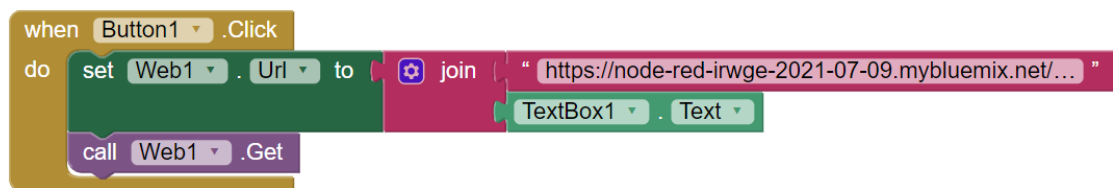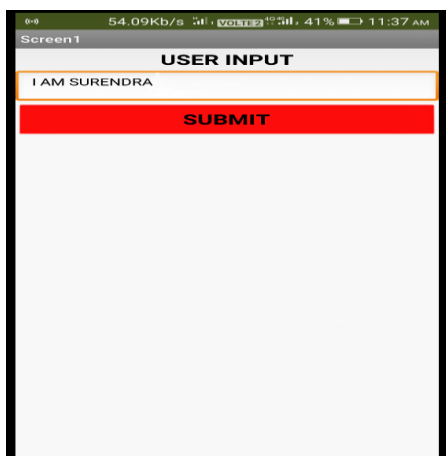
Application UI

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

UI block logic

User Input given from mobile

Data received successfully to the Node Red debug window

```
7/19/2021, 11:29:33 AM   node: 564c0e1a.96099
msg.payload : Object
  ▶ { command: "HELLO ALL" }

7/19/2021, 11:32:56 AM   node: 564c0e1a.96099
msg.payload : Object
  ▶ { command: "HELLO ALL" }

7/19/2021, 11:35:04 AM   node: 564c0e1a.96099
msg.payload : Object
  ▶ { command: "HELLO ALL" }

7/19/2021, 11:36:32 AM   node: 564c0e1a.96099
msg.payload : Object
  ▶ { command: "I AM SURENDRA" }

7/19/2021, 11:36:48 AM   node: 564c0e1a.96099
msg.payload : Object
  ▶ { command: "HELLO ALL" }

7/19/2021, 11:37:42 AM   node: 564c0e1a.96099
msg.payload : Object
  ▶ { command: "HELLO ALL" }
```

Python shell of Reciving Data

```
2021-07-19 11:33:54,023   wiotp.sdk.device.client.DeviceClient   INFO      Connecte
d successfully: d:0aaw8c:VITDevice:12345
Message received from IBM IoT Platform: HELLO ALL
Message received from IBM IoT Platform: I AM SURENDRA
Message received from IBM IoT Platform: HELLO ALL
Message received from IBM IoT Platform: HELLO ALL
```