VIT-IOT(INDUSTRY CERTIFICATE INTERNSHIP PROGRAM)

ASSIGNMENT-4

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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).

Fig.1 Python code editor window

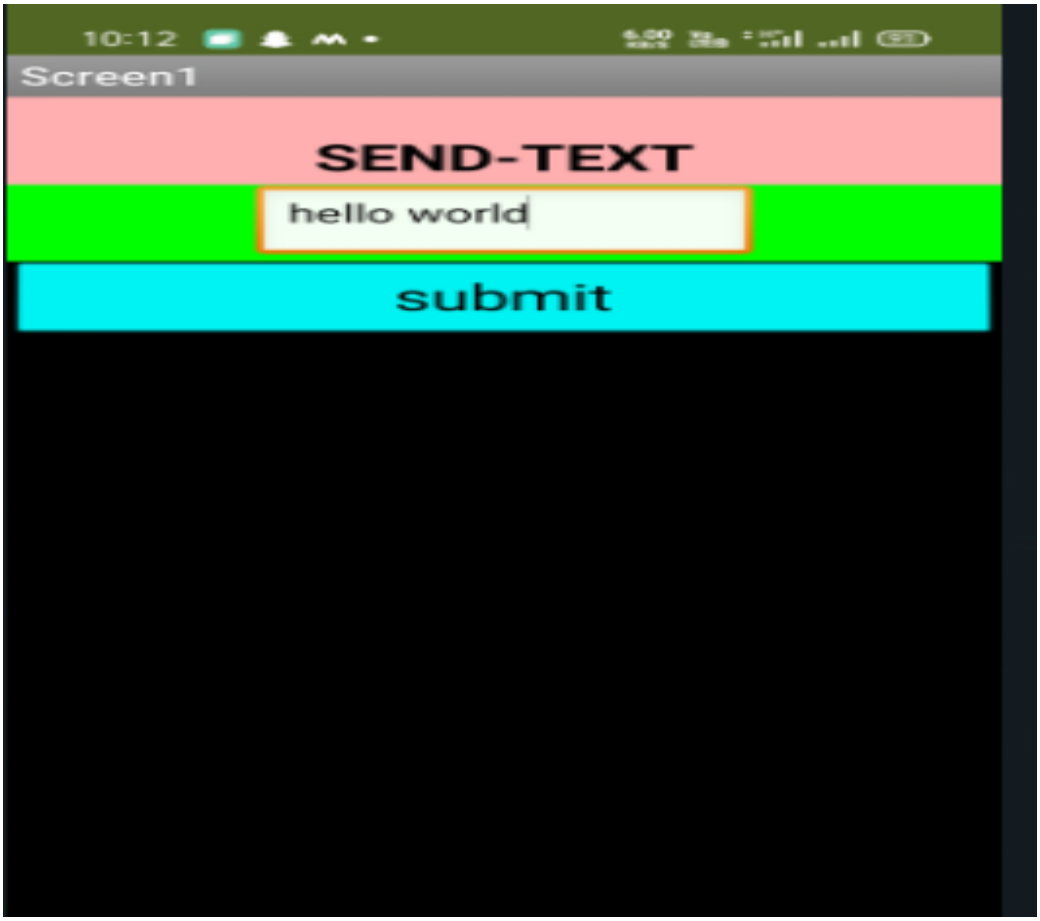
device development code.py - C:\Users\HP\OneDrive\Desktop\assignment\Assigment-4\device development code.py (3.9.6)

File Edit Format Run Options Window Help

```
import wiotp.sdk.device
import time
import random
myConfig = {
    "identity": {
        "orgId": "7jh6o2",
        "typeId": "VITDevice",
        "deviceId":"12345"
    },
    "auth": {
        "token": "12345678"
    }
}

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()
```

Python Code:

Fig2. Application UI


10:12
Screen1
SEND-TEXT
hello world
submit

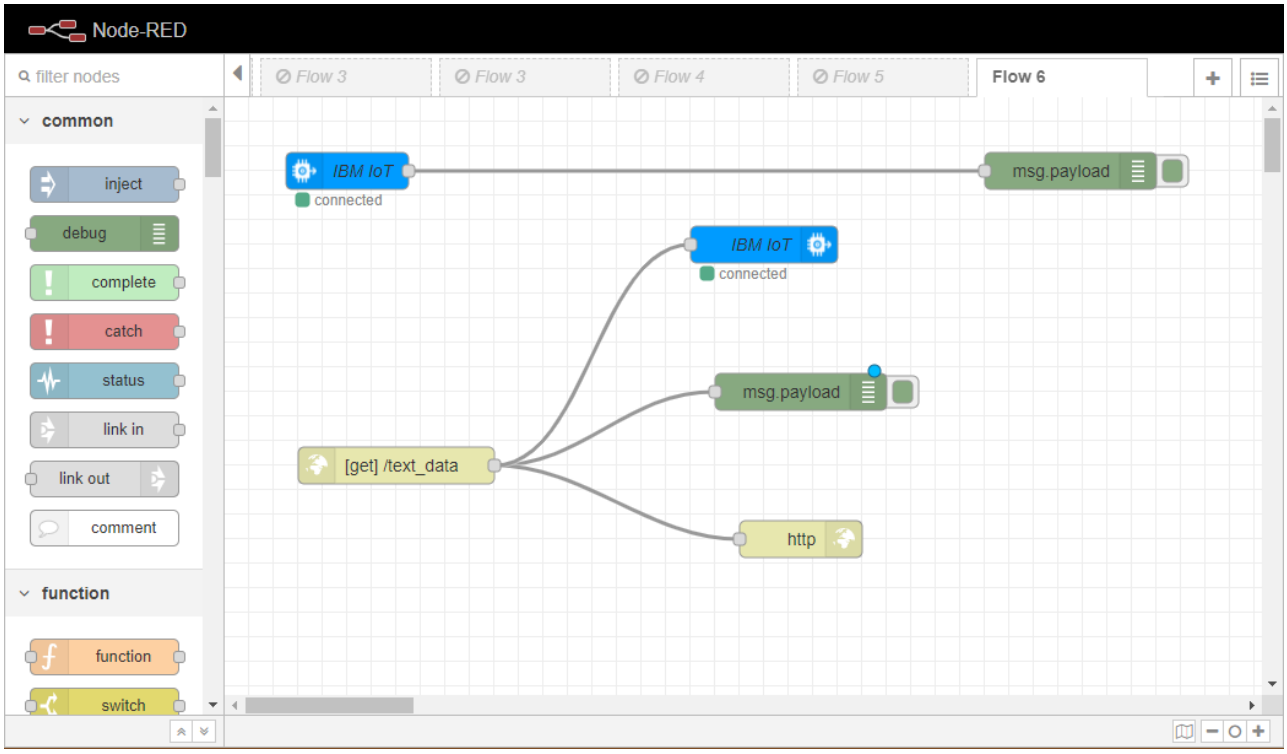


Fig3. Node Red flow chart → In this The IBM IoT Node connects the Device with python code

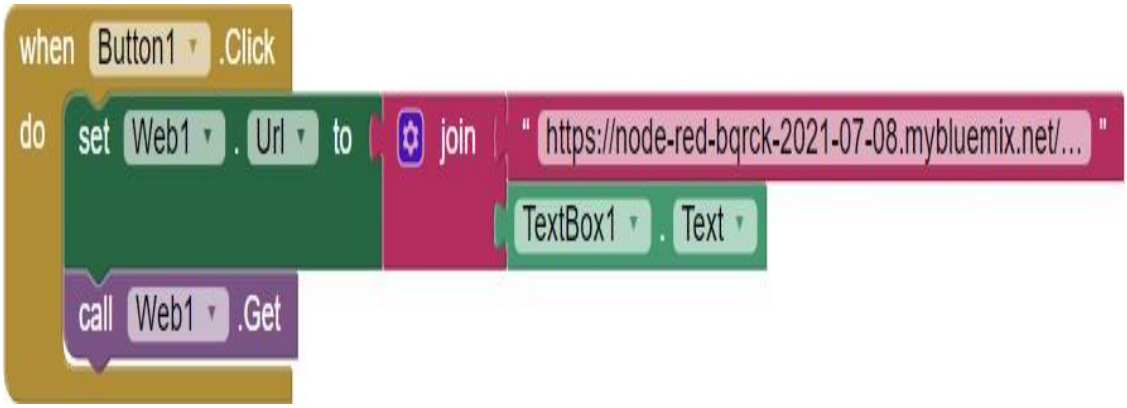


Fig.4. UI block logic

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

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