

VIT-IOT-INDUSTRY CERTIFICATE-EXTERNSHIP PROGRAM

ASSIGNMENT-4


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:

 *Assignment 4.py - D:/Assignment 4/Assignment 4.py (3.9.6)*

File Edit Format Run Options Window Help

```
import wiotp.sdk.device
import time
import random
myConfig = {
    "identity": {
        "orgId": "rxdn0x",
        "typeId": "Soujanya",
        "deviceId": "12345"
    },
    "auth": {
        "token": "123456789"
    }
}

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
import time
import random

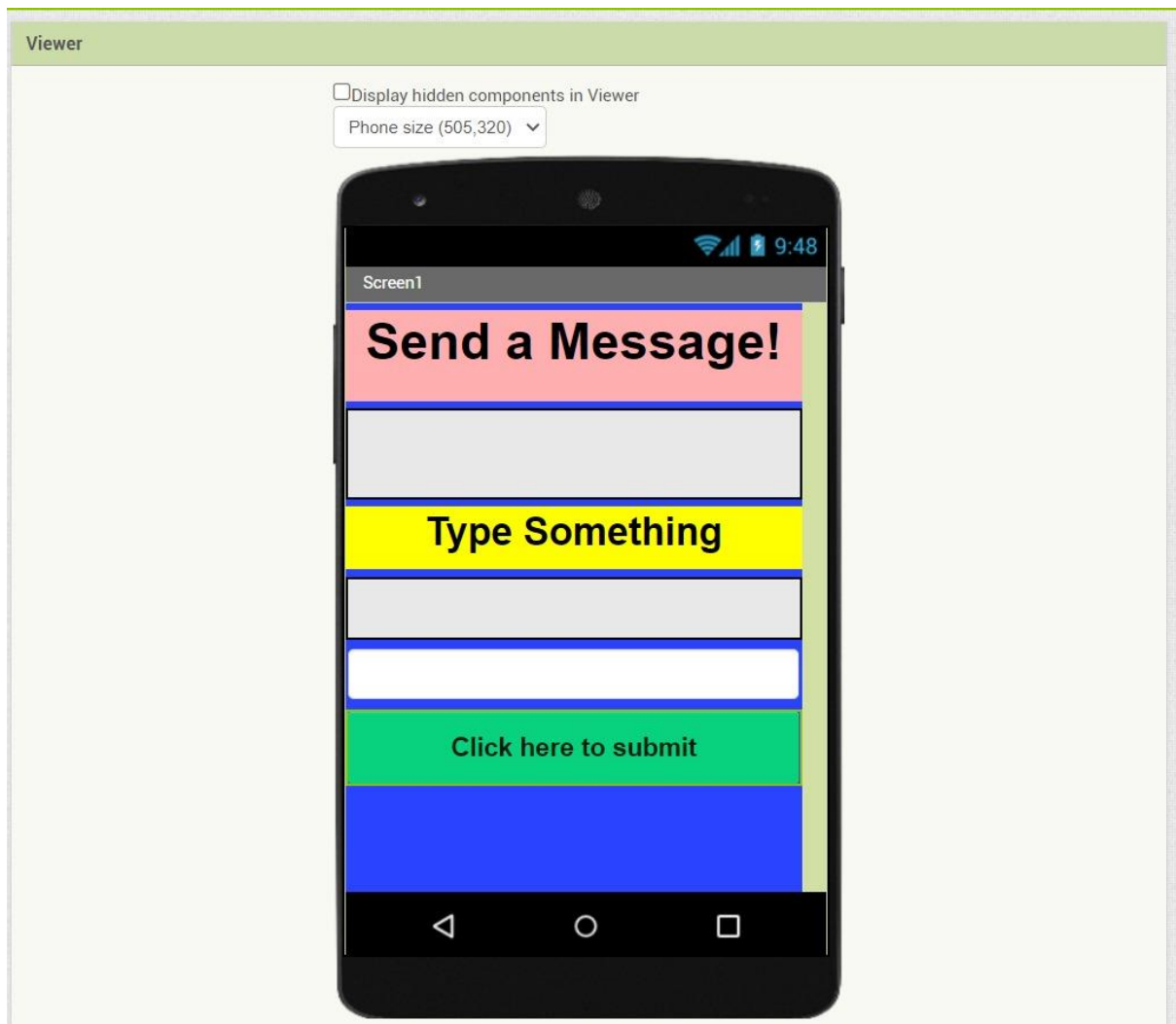
myConfig = {
    "identity": {
        "orgId": "rxdn0x",
        "typeId": "Soujanya",
        "deviceId": "12345"
    },
    "auth": {
        "token": "123456789"
    }
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    print("Message received from IBM IoT Platform: %s" % cmd.data['command'])
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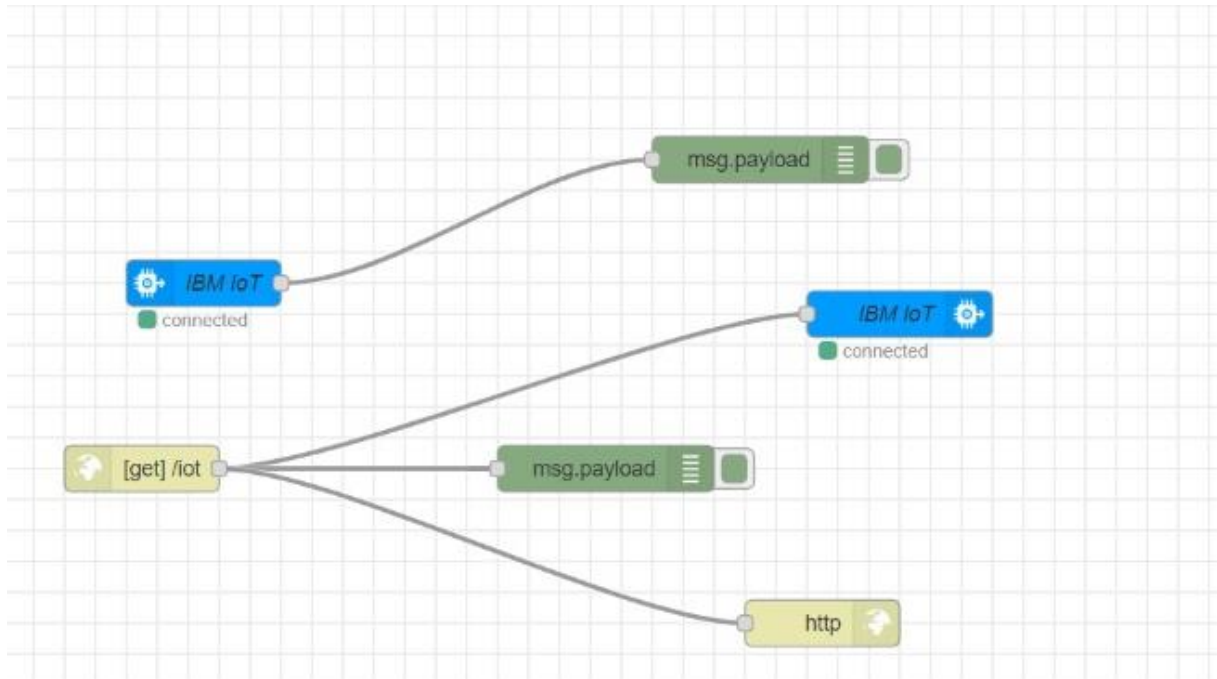
client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
client.connect()

while True:
    client.commandCallback = myCommandCallback
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client.disconnect()
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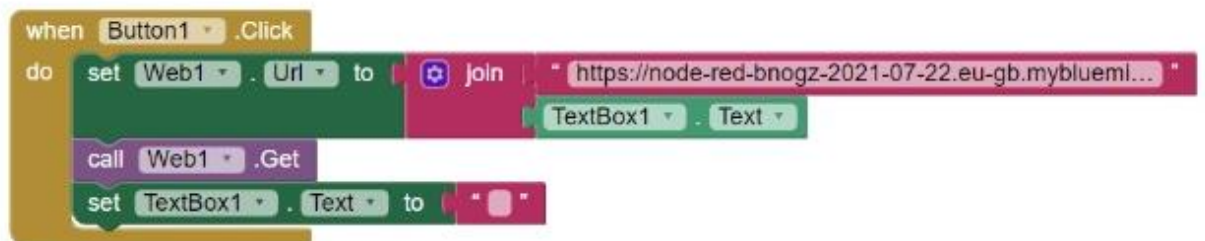
APPLICATION UI:



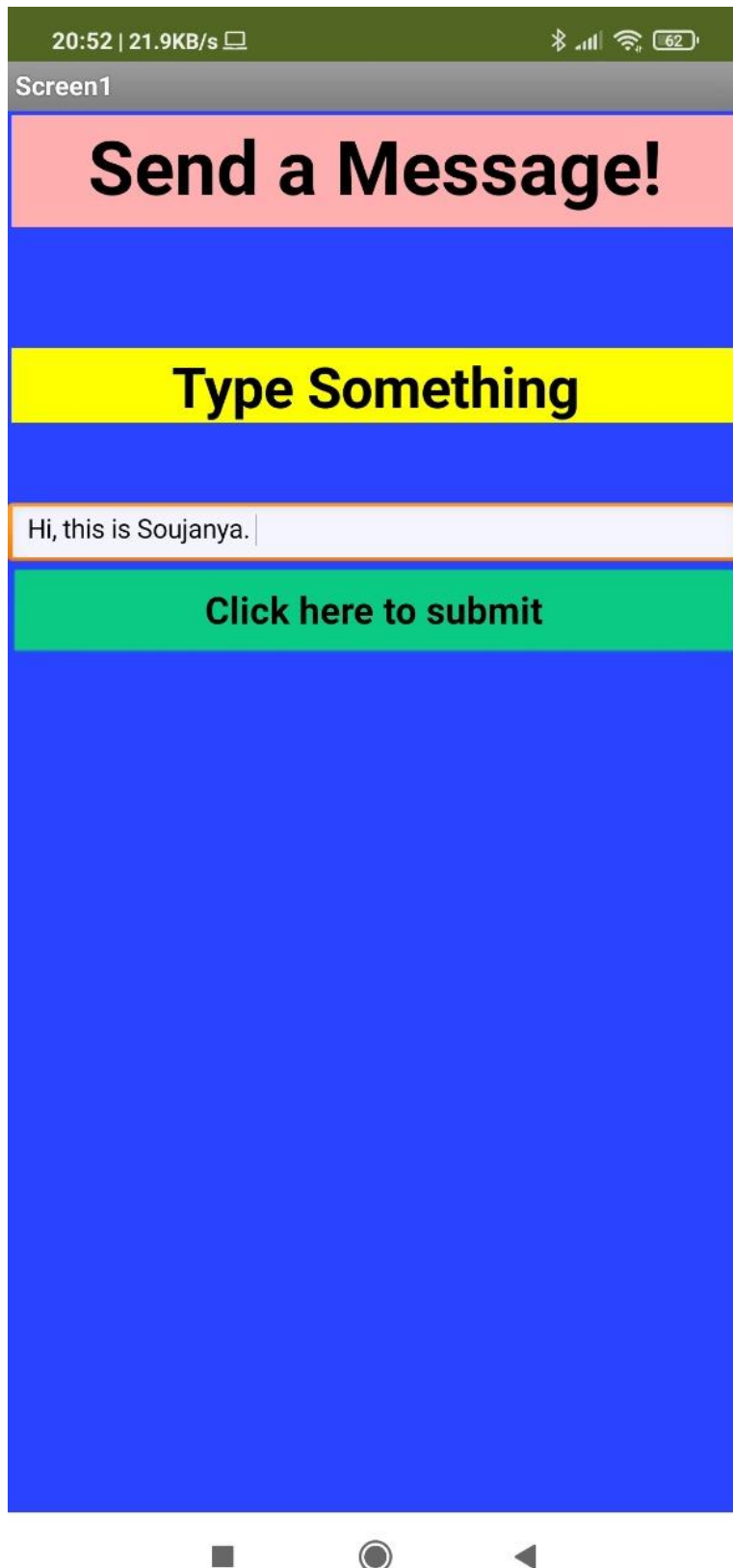
NODE-RED FLOW:



UI BLOCK LOGIC:



USER INPUT:



The screenshot shows a mobile application interface with a blue background. At the top, there is a status bar with the time 20:52, a data speed of 21.9KB/s, and icons for Bluetooth, cellular signal, Wi-Fi, and a 62% battery level. Below the status bar is a grey header labeled "Screen1". The main content area consists of several stacked elements: a pink rectangular box with the text "Send a Message!" in bold black font; a large blue rectangular area; a yellow rectangular box with the text "Type Something" in bold black font; another large blue rectangular area; a white text input field with a thin orange border containing the text "Hi, this is Soujanya." and a cursor; and a green rectangular button with the text "Click here to submit" in bold black font. At the bottom of the screen, there are three standard Android navigation icons: a square, a circle, and a triangle.

DATA RECEIVED:



PYTHON SHELL:

```
Python 3.9.6 (tags/v3.9.6:db3ff76, Jun 28 2021, 15:26:21) [MSC v.1929 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
==== RESTART: D:\SMART INTERNZ\Assignments\Assignment 4\Assignment4-code.py ====
2021-08-02 20:54:14,188 wiotp.sdk.device.client.DeviceClient INFO Connected successfully: d:cvtwoa:Device1:mydev123
Message received from IBM IoT Platform: Hi, this is Soujanya
Message received from IBM IoT Platform: I'm from Tirupati
Message received from IBM IoT Platform: I'm a Sophomore in VIT
|
```