

## SmartBridge Externship

Name: Harshitha Munagala

Registration number:19BEC0565

### 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:

```
import wiotp.sdk.device
import time
import random
```

```
myConfig = {
    "identity": {
        "orgId": "x012hb",
        "typeId": "VITDevice",
        "deviceId": "500062"
    },
    "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()
```

\*Assignment 4-SmartBridge\_Input.py - C:\Users\91995\AppData\Local\Programs\Python\Python37-32\Assignment 4-SmartBridge\_Input.py (3.7.4)\*

File Edit Format Run Options Window Help

```
import wiotp.sdk.device
import time
import random

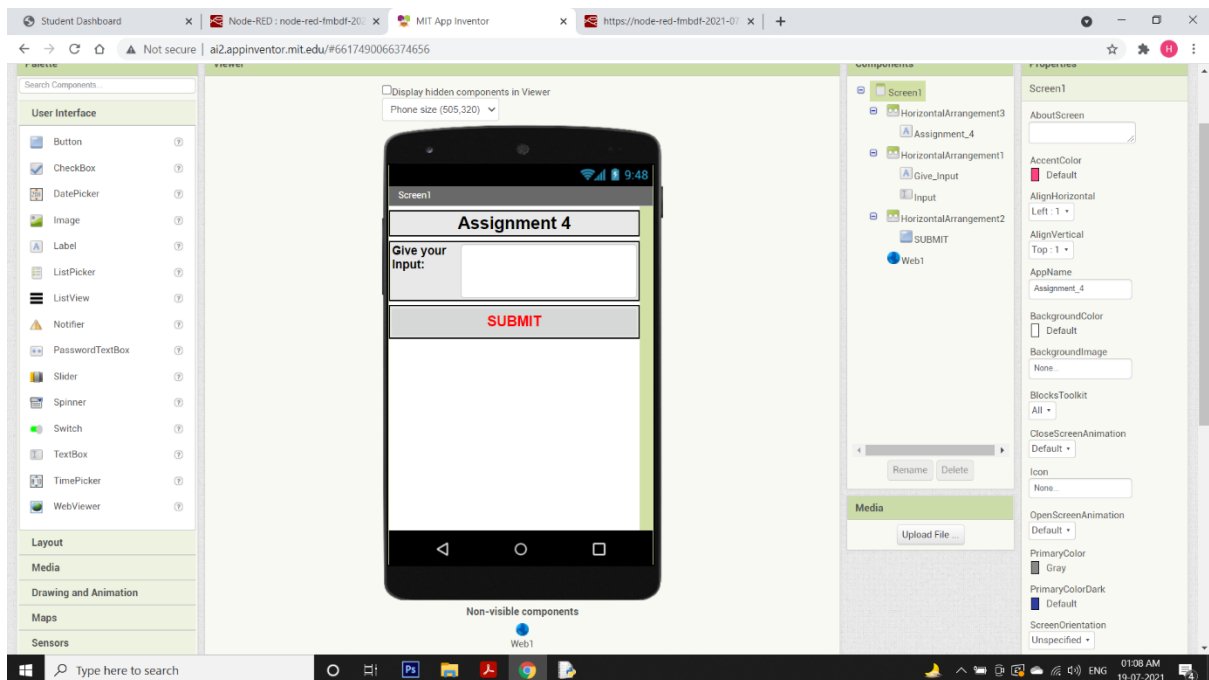
myConfig = {
    "identity": {
        "orgId": "x012hb",
        "typeId": "VITDevice",
        "deviceId": "500062"
    },
    "auth": {
        "token": "12345678"
    }
}

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

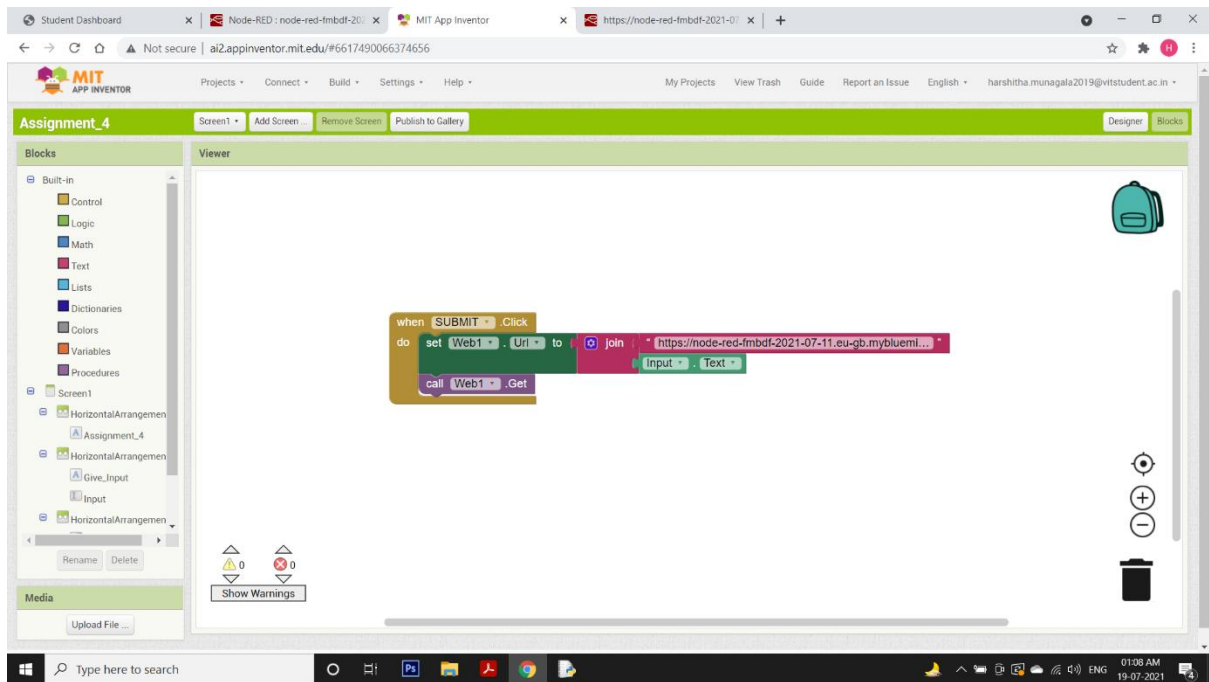
client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
client.connect()

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

Python code

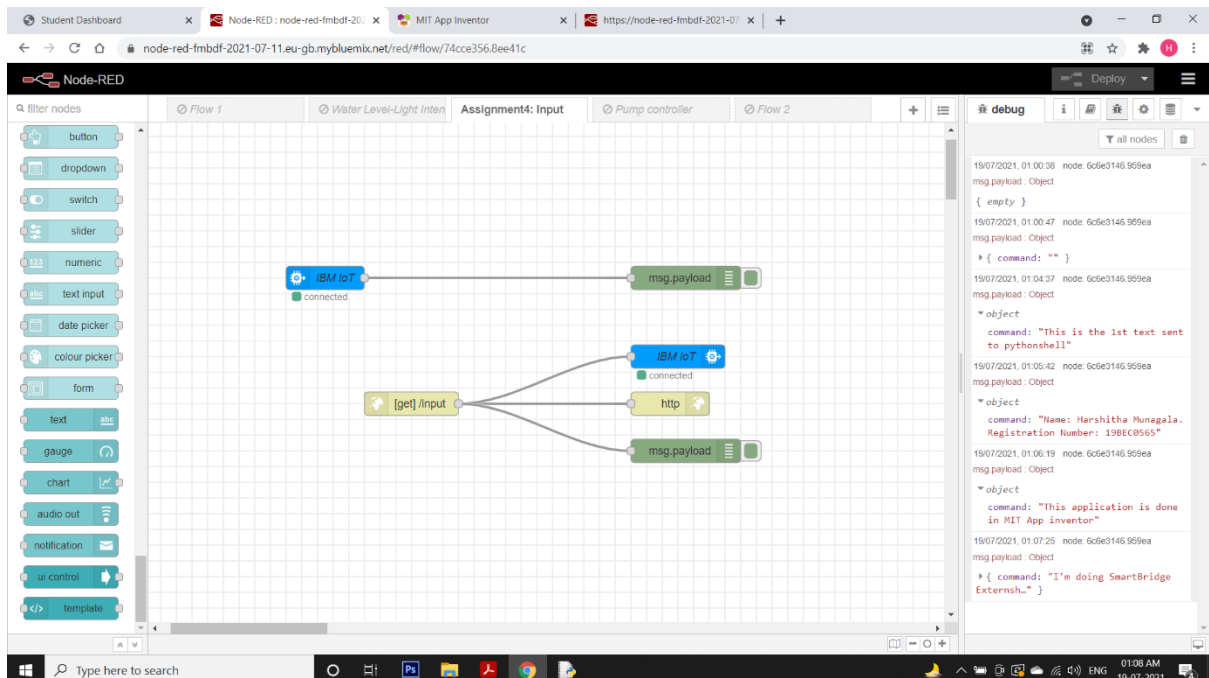


Mobile app design in MIT App Inventor



## Mobile App Blocks in MIT App Inventor

url: <https://node-red-fmbdf-2021-07-11.eu-gb.mybluemix.net/input?command=>

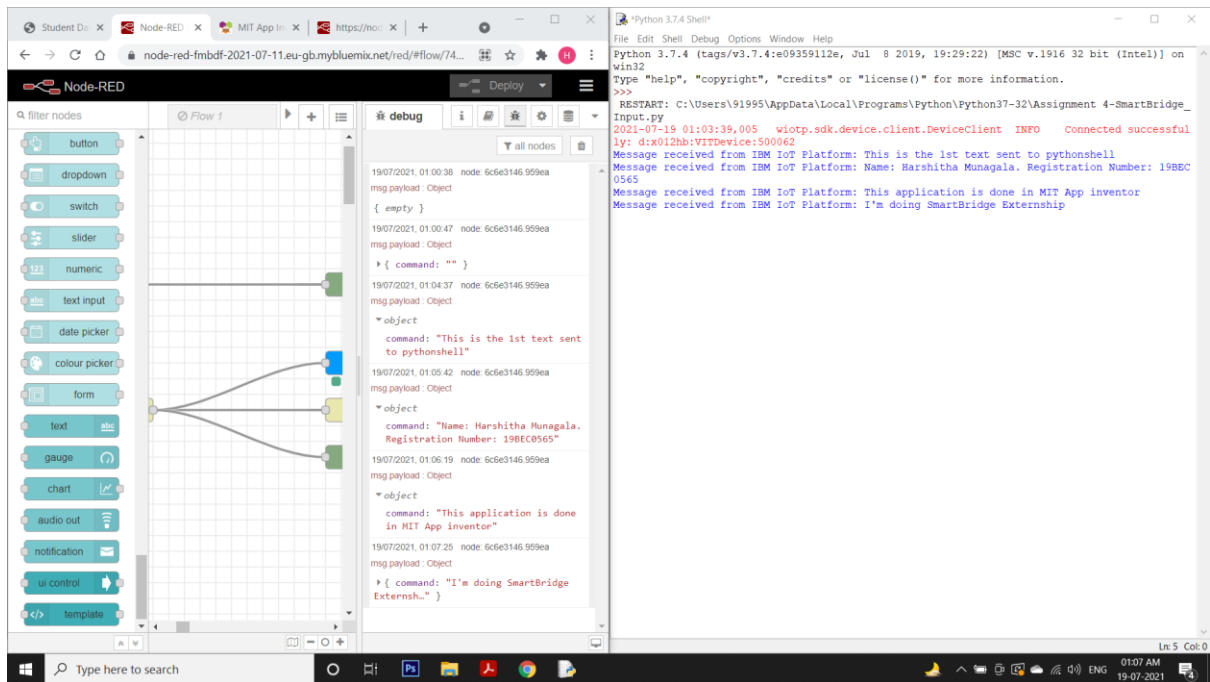


Node-red flow that connects IBM IoT to the mobile application

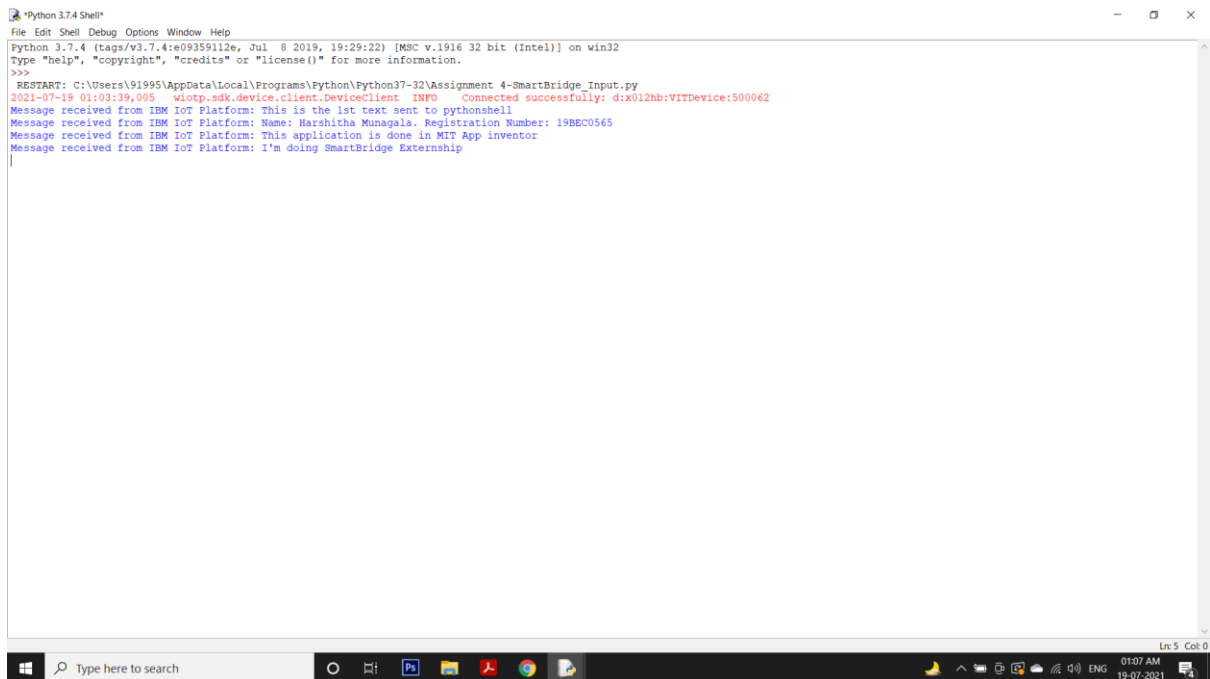
Inputs given through the mobile application connected to MIT AI2 Companion:

This screenshot shows a mobile application interface with a green header bar displaying the time 1:04 and status icons. Below the header, a grey bar contains the text 'Screen1'. The main content area has a white background with the title 'Assignment 4' in bold black text. To the left of the input field is the label 'Give your Input:'. The input field itself contains the text 'This is the 1st text sent to pythonshell'. Below the input field is a wide grey button with the word 'SUBMIT' in red capital letters. On the right side of the screen, there is a vertical black bar with three white icons: a back arrow, a circle, and three horizontal lines.

This block contains two screenshots of the same mobile application interface. The top screenshot shows the time 1:05 and the input field containing the text 'Name: Harshitha Munagala. Registration Number: 19BEC0565'. The bottom screenshot shows the time 1:06 and the input field containing the text 'This application is done in MIT App inventor'. Both screenshots maintain the same layout as the first one, with a green header bar, a grey 'Screen1' bar, a white main area with the title 'Assignment 4', the 'Give your Input:' label, the text input field, the 'SUBMIT' button, and a vertical black bar with three white icons on the right.



Debug screen in Node-red



Output in the python shell