

Assignment 4

P. Sri Bala Harish

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:

```
import wiotp.sdk.device
import time
import random
myConfig = {
    "identity": {
        "orgId": "aannkh",
        "typeId": "VITharish",
        "deviceId": "12345"
    },
    "auth": {
        "token": "9381628451"
    }
}

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:
```

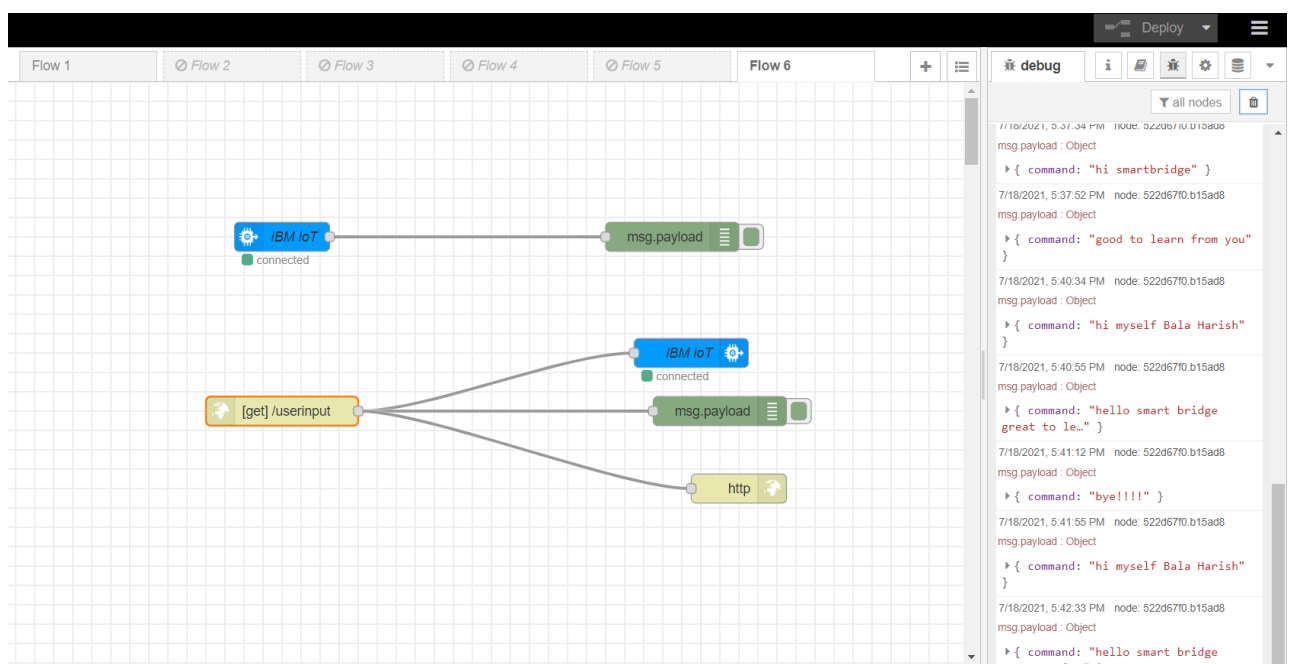
```
    client.commandCallback = myCommandCallback
```

```
    #print(client.commandCallback)
```

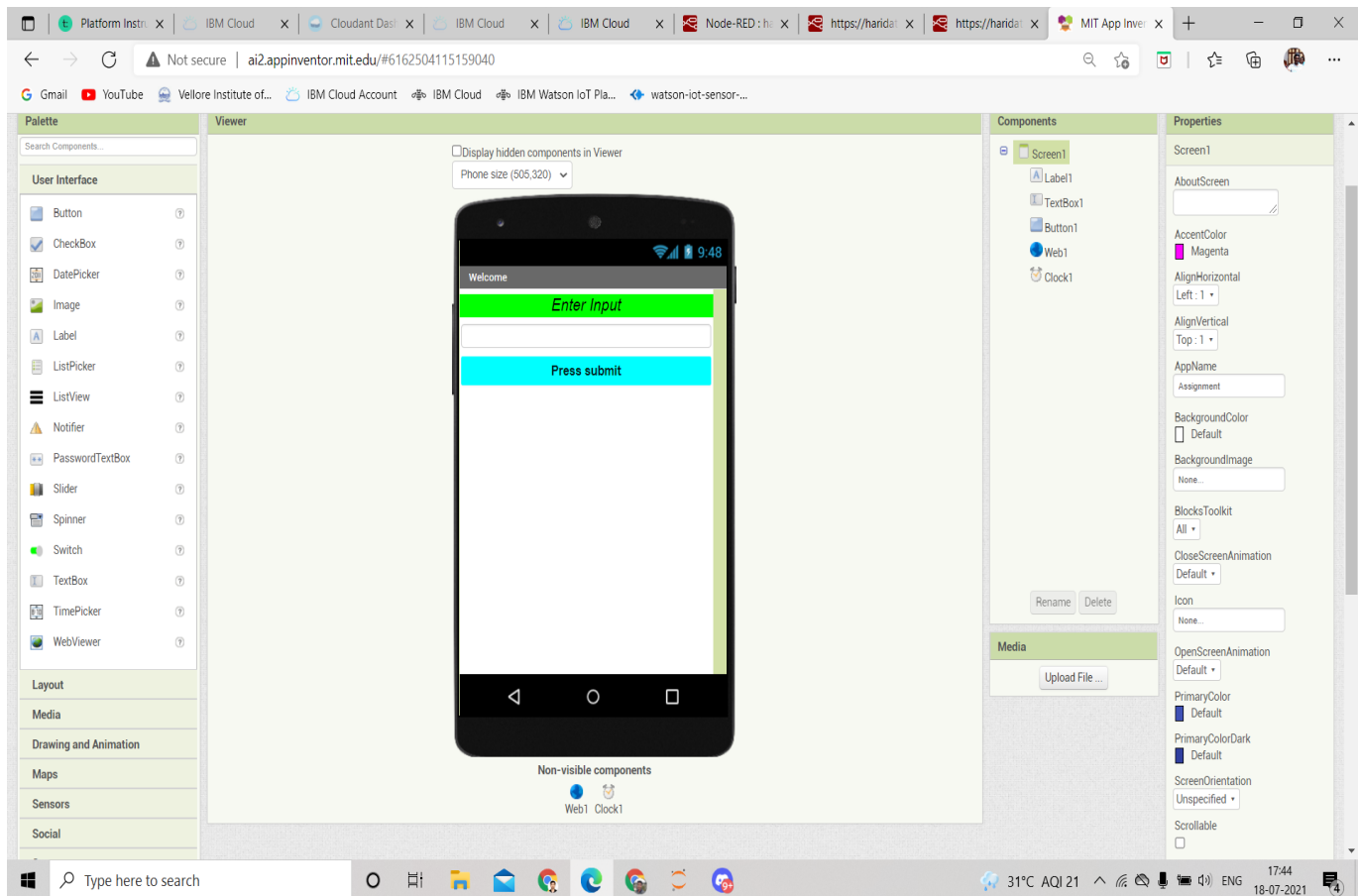
```
    time.sleep(2)
```

```
client.disconnect()
```

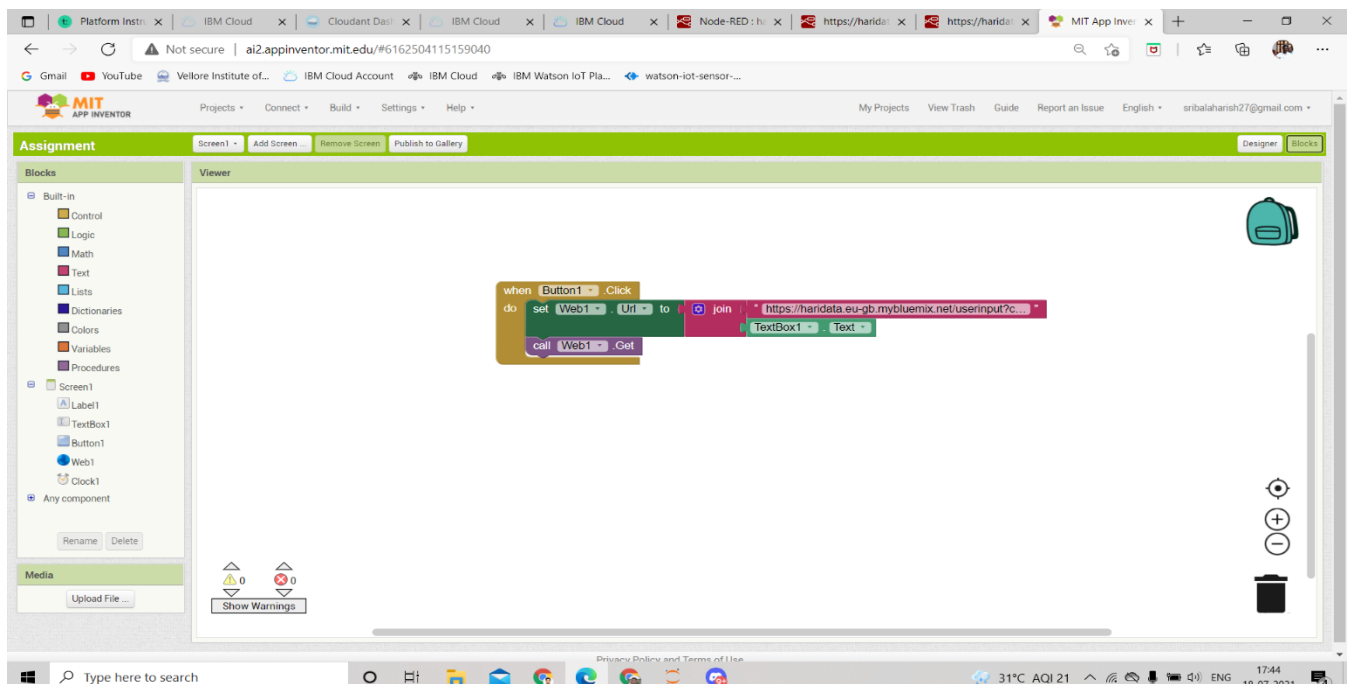
Nodered flow:



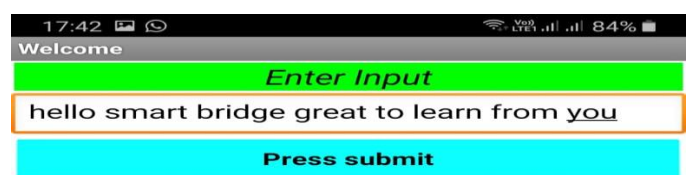
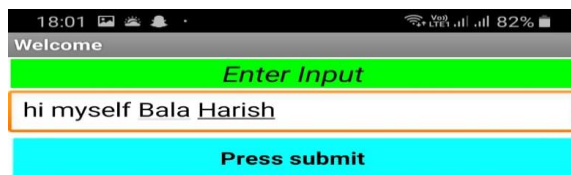
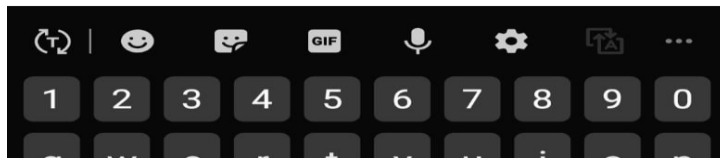
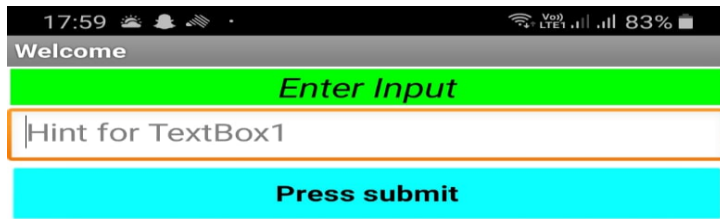
MIT App Designer:

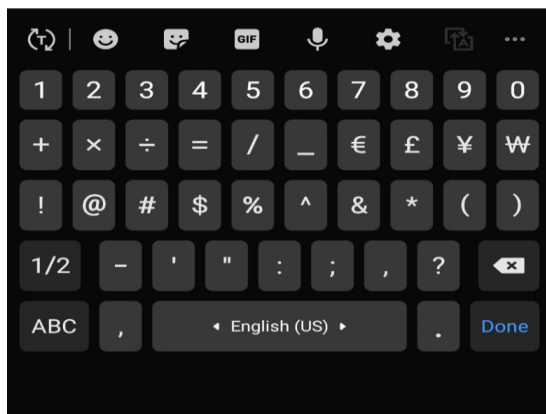
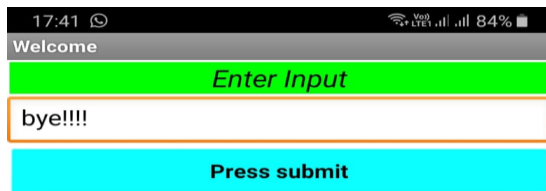


MIT App Blocks:



Output:





Python shell output:

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

```
2021-07-18 17:40:18,313  wiotp.sdk.device.client.DeviceClient  INFO    Connected successfully: d:aannkh:VITharish:12345
```

```
Message received from IBM IoT Platform: hi myself Bala Harish
Message received from IBM IoT Platform: hello smart bridge great to learn from you
Message received from IBM IoT Platform: bye!!!!
Message received from IBM IoT Platform: hi myself Bala Harish
Message received from IBM IoT Platform: hello smart bridge great to learn from you
```

Node red debug:

```
}  
7/18/2021, 5:40:34 PM node: 522d67f0.b15ad8  
msg.payload : Object  
  ▶ { command: "hi myself Bala Harish"  
    }  
7/18/2021, 5:40:55 PM node: 522d67f0.b15ad8  
msg.payload : Object  
  ▶ { command: "hello smart bridge  
    great to le..." }  
7/18/2021, 5:41:12 PM node: 522d67f0.b15ad8  
msg.payload : Object  
  ▶ { command: "bye!!!!" }  
7/18/2021, 5:41:55 PM node: 522d67f0.b15ad8  
msg.payload : Object  
  ▶ { command: "hi myself Bala Harish"  
    }  
7/18/2021, 5:42:33 PM node: 522d67f0.b15ad8  
msg.payload : Object  
  ▶ { command: "hello smart bridge  
    great to le..." }
```