

Assignment
#####

Assignment 4 *****

:Question: Taking commands from mobile application.

Code

====

Python code::

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

```
myConfig = {
    "identity": {
        "orgId": "cljthj",
        "typeId": "Device",
        "deviceId": "12345"
    },
    "auth": {
        "token": "12345678"
    }
}
```

```
def myCommandCallback(cmd):
    print(
        "Device sent following message: '{0}'".format(cmd.data['command'],)
    )
```

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

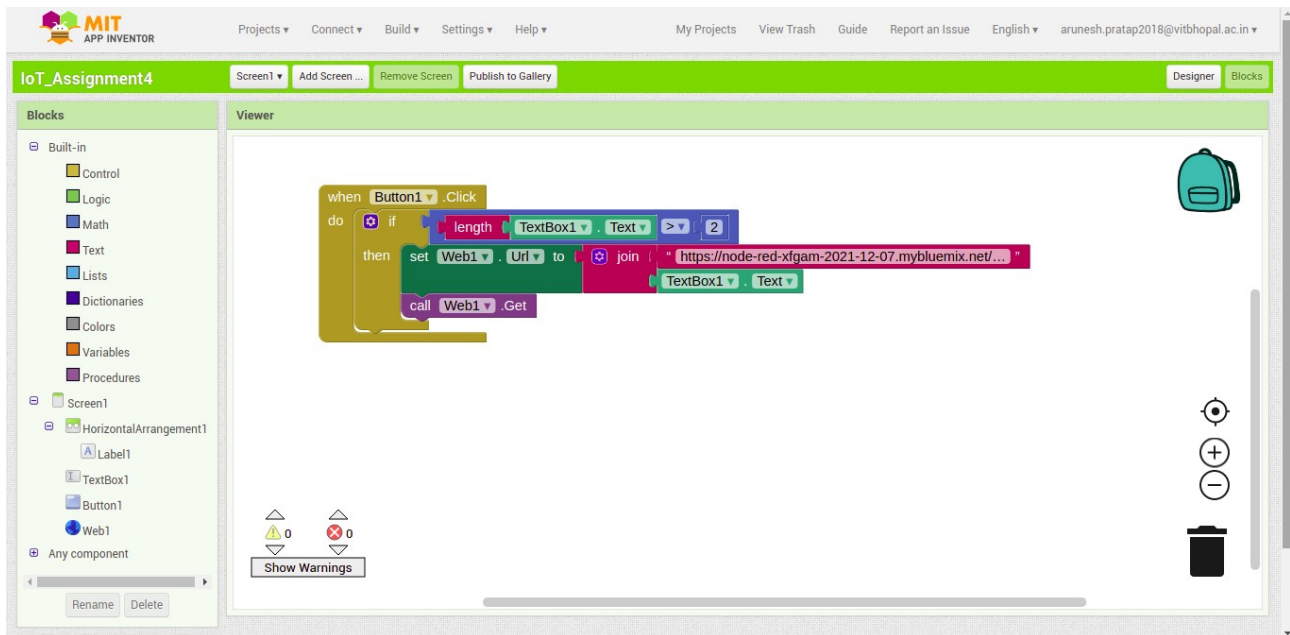
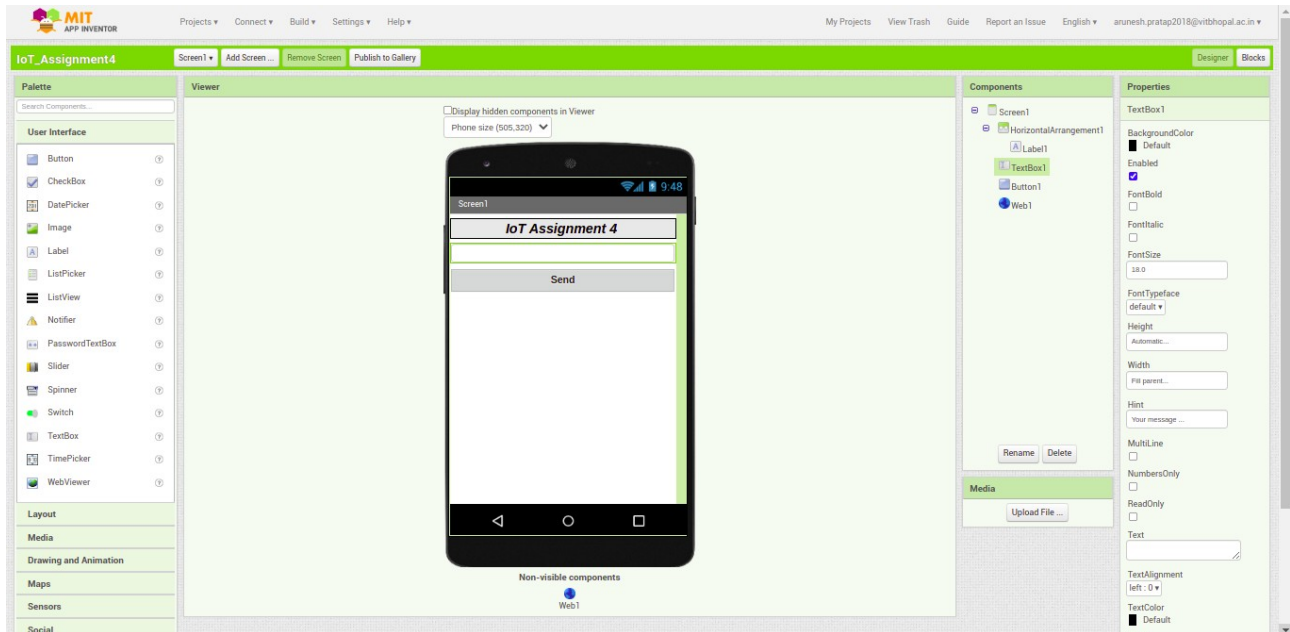
```
client.commandCallback = myCommandCallback
```

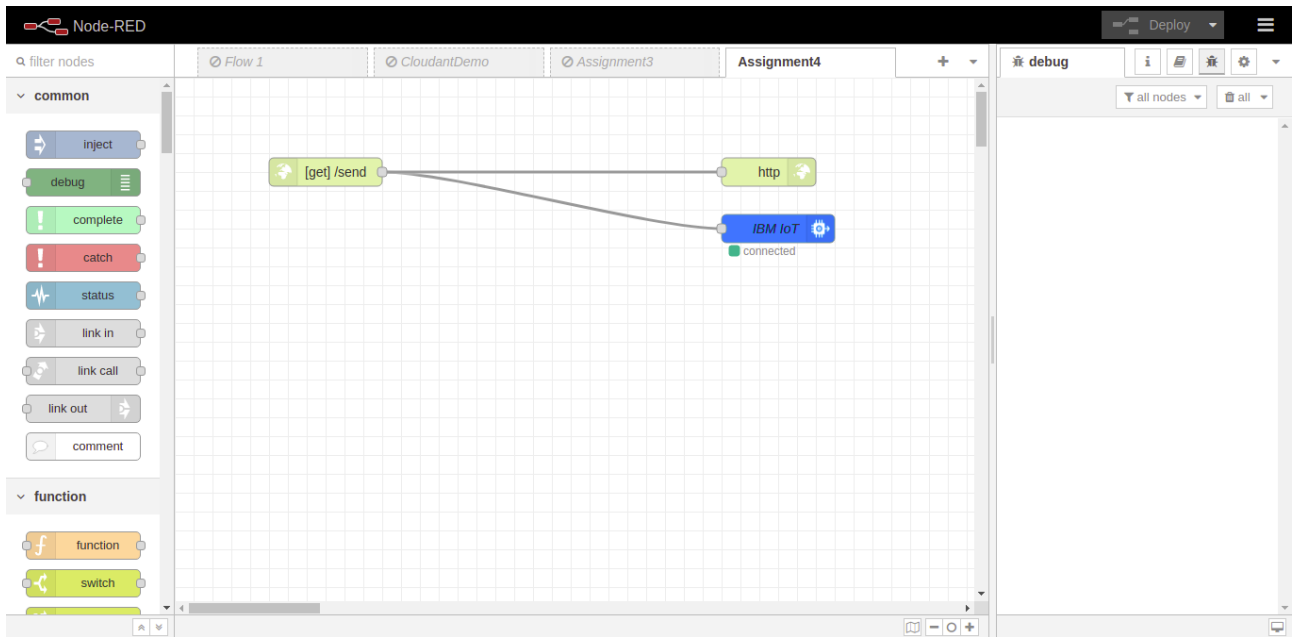
```
i = 0
try:
    while i < 40:
        i += 1
        time.sleep(0.4)
        if (i == 39):
            print('About to end...')
            key = input('Y to continue, else quit: ')
            if (key.lower() in ('y', 'c', '1')):
                i = 0
                continue
```

```
    print('Exiting ...\n')
except KeyboardInterrupt:
    print('Exiting ...\n')
```

client.disconnect()

Screenshots





The screenshot shows the Node-RED web interface with the 'Edit http in node' dialog box open. The dialog box has a 'Delete' button, 'Cancel' and 'Done' buttons, and a 'Properties' section. The 'Properties' section contains three fields: 'Method' (set to 'GET'), 'URL' (set to '/send'), and 'Name' (set to 'Name'). The 'Enabled' checkbox is checked. The background shows the same flow as the first screenshot, but the 'http' node is now highlighted in yellow.

Node-RED interface showing the configuration of an **http response node**.

Left Panel (Nodes):

- common:** inject, debug, complete, catch, status, link in, link call, link out, comment.
- function:** function, switch.

Flow 1: A flow with a single node labeled **[get] /send**.

Edit http response node:

- Delete:** [Delete] [Cancel] [Done]
- Properties:**
 - Name:** Name
 - Status code:** msg.statusCode
 - Headers:** (Empty list)
- add:** + add
- Message:** The messages sent to this node **must** originate from an *http input node*
- Enabled:** ☐ Enabled

Right Panel (debug): **debug** | [all nodes] | [all]

Node-RED interface showing the configuration of an **ibmiot out node**.

Left Panel (Nodes):

- common:** inject, debug, complete, catch, status, link in, link call, link out, comment.
- function:** function, switch.

Flow 1: A flow with a single node labeled **[get] /send**.

Edit ibmiot out node:

- Delete:** [Delete] [Cancel] [Done]
- Properties:**
 - Authentication:** API Key
 - Output Type:** Device Command
 - Device Type:** Device
 - Device Id:** 12345
 - Event Type:** cmd
 - Format:** json
 - Data:** data
 - QoS:** 0
 - Name:** IBM IoT
 - Service:** registered
- Enabled:** ☐ Enabled

Right Panel (debug): **debug** | [all nodes] | [all]

node-red-xfgam-2021-12-07.mybluemix.net/send?command=HeyThere

```
{"command": "HeyThere"}
```

```
2021-12-10 21:13:37,101 wiotp.sdk.device.client.DeviceClient INFO Connecte
d successfully: d:cljthj:Device:12345
Device sent following message: 'HeyThere'
About to end...
Y to continue, else quit:
Exiting ...
```

```
2021-12-10 21:13:55,373 wiotp.sdk.device.client.DeviceClient INFO Disconne
ctd from the IBM Watson IoT Platform
2021-12-10 21:13:55,374 wiotp.sdk.device.client.DeviceClient INFO Closed c
onnection to the IBM Watson IoT Platform
```

IoT Assignment 4

Send