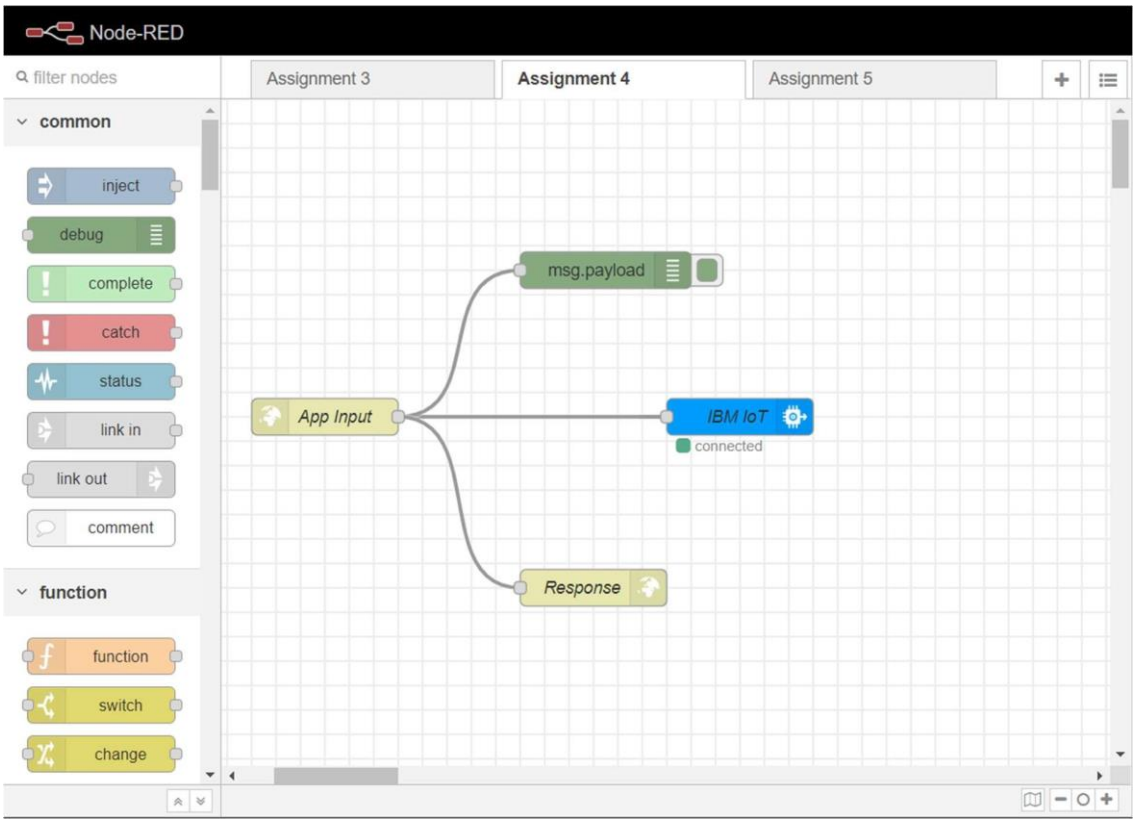
ASSIGNMENT-4

Develop a mobile application that takes the user input and sends it to IoT device (python code). print the received data in python shell.

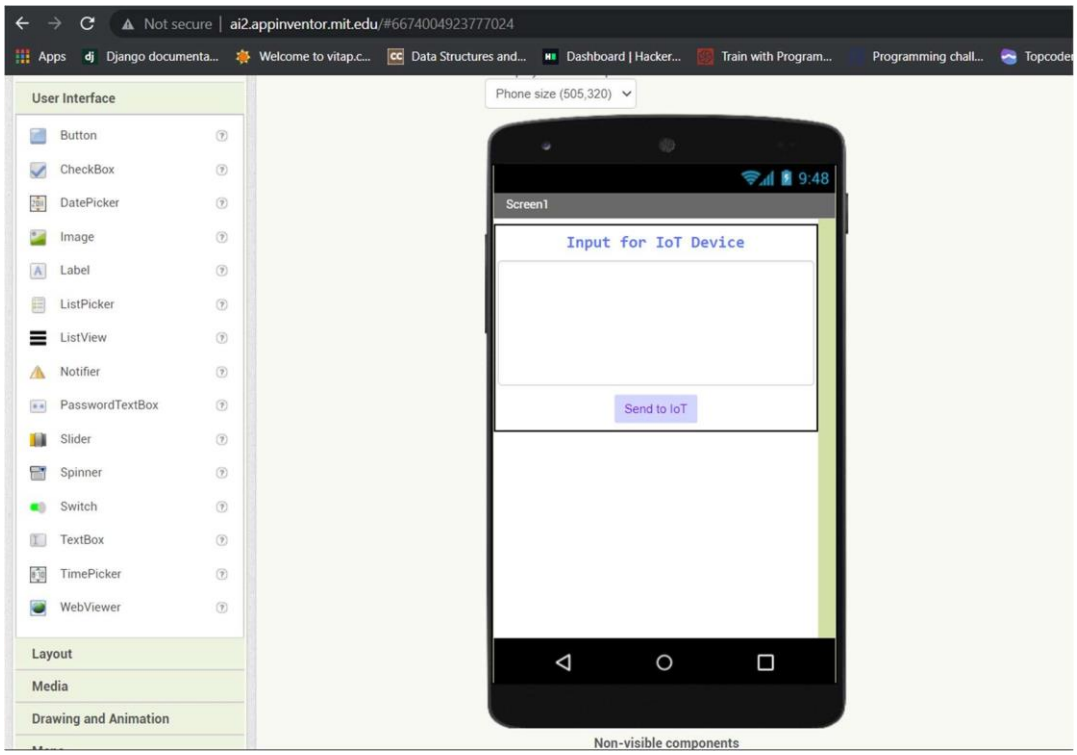
Keep a text box to accept the user input. Integrate a submit button.

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).

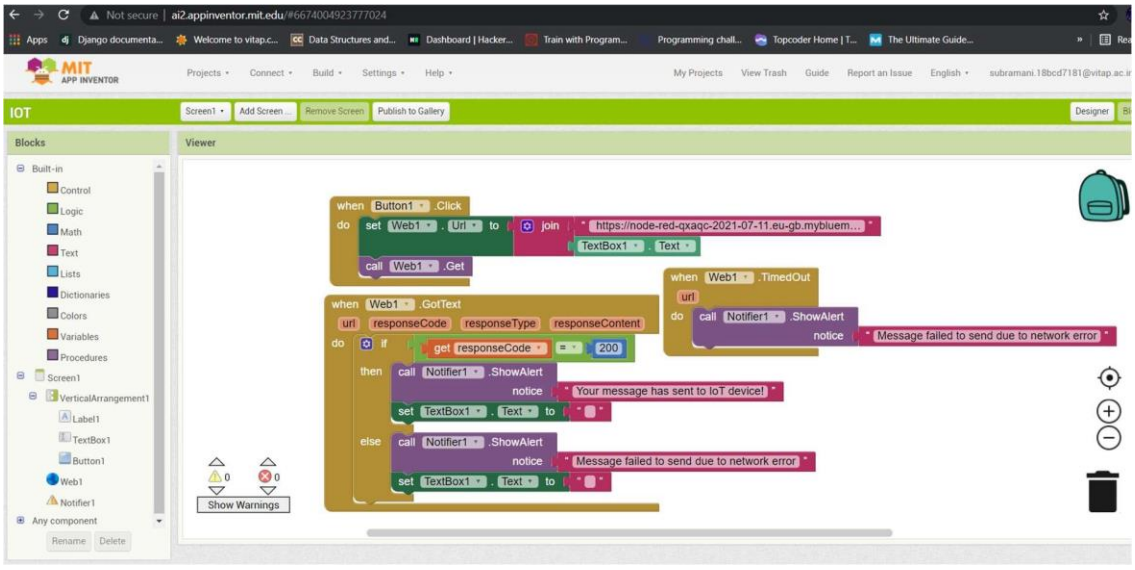
Node Red Architecture:



MIT App Design:



MIT APP Logic Blocks:



Python Code:

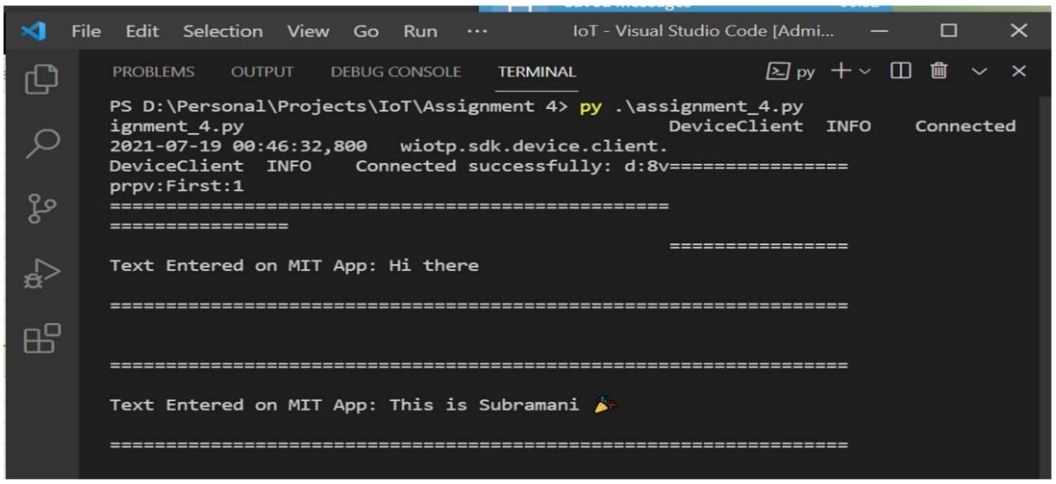
```
from pytz import timezone
from wiotp.sdk.device import DeviceClient
config = {
    "identity":{
        "orgId":"8vprpv",
        "typeId":"First",
        "deviceId":"1"
    },"auth":{
        "token":"12345678"}}
def callBackFunc(cmd):
    print("================================================================\
n")
    print(f"Text Entered on MIT App: {cmd.data['from_mit_app']}\n")
    print("================================================================\
n\n")
client = DeviceClient(config=config)
client.connect()
while True:
    client.commandCallback = callBackFunc
client.disconnect()
```

Working Prototype:

1. **Sending message when IoT is enabled**

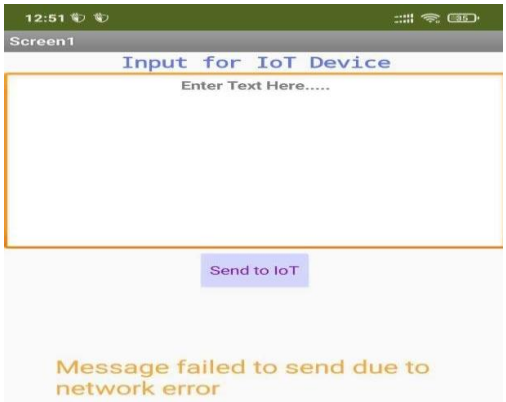
    a. **App View (notification will be enabled on success)**

b. Python Console Output



2. Sending message when IoT is disabled or connection time-out

a. App View (notification will be enabled on Failure)



b. Python Console