

## ASSIGNMENT – 4

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

### **Code:**

```
import wiotp.sdk.device

import time

import random

myConfig = {

    "identity": {

        "orgId": "y9045l",

        "typeId": "mobile",

        "deviceId": "09876"

    },

    "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:

    level=random.randint(0,500)

    myData={'waterlevel':level,}

    client.publishEvent(eventId="status", msgFormat="json", data=myData,
qos=0, onPublish=None)

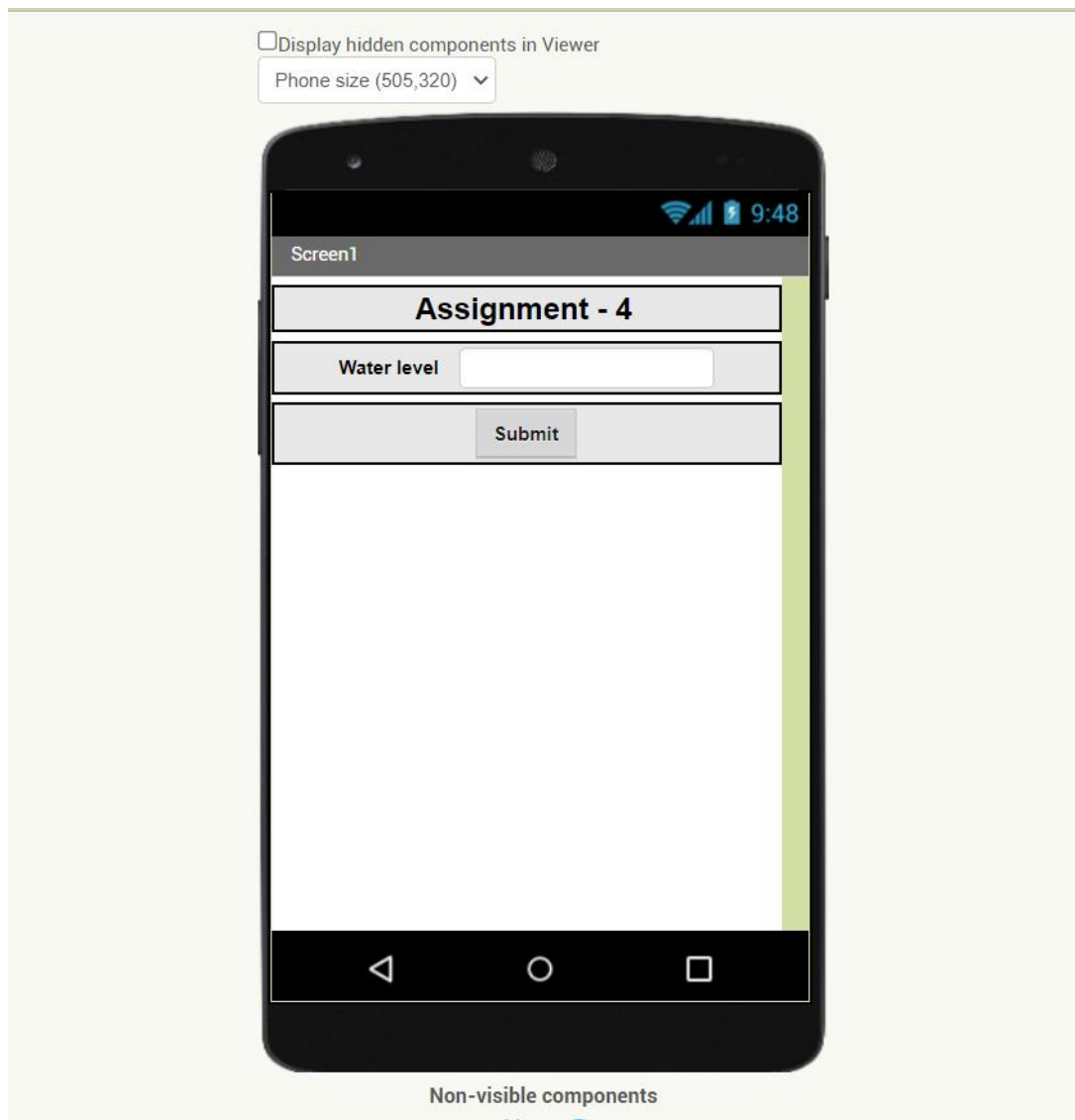
    print("Published data Successfully: %s", myData)

    client.commandCallback = myCommandCallback

    time.sleep(2)

client.disconnect()
```

## Mobile App Interface:



The Node-RED flow diagram illustrates the logic for the "Submit" button. It begins with a "when" trigger block labeled "Button1" and ".Click". This is followed by a "do" block containing two actions: "set Web1 . Url to" with the value "https://node-red-xrdn-2021-12-02.mybluemix.net/..." and "call Web1 .Get". Below this, another "when" trigger block is labeled "Web1" and ".GotText". Its "do" block contains a "set TextBox1 . Text to" action, where the value is "get responseContent".

At the bottom left, there are two status indicators: a yellow triangle with a warning icon and a red circle with an 'X' icon, both showing a count of 0. Below these is a button labeled "Show Warnings".

## Output:

10:04 PM10.1KB/sLTE50

Screen1

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Water level

{ "water level": 379 }

Submit