## SPRINT 2

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## **Summary:**

In this sprint, the following are done:

- a) Sound effects added in the MIT platform(phone app)
- b) Phone UI is made better
- c) Data in the backend is scrutinized to match real-world case.

## CODE:

```
set Web1 · . Url · to ( http://159.122.178.5:31562/sensor "
             call Web1 ▼ .Get
url responseCode responseType responseContent do set TextBox1 . Text to look up in pairs key
                                                                                                                                                                                            " (turbidity )
                                                                                                                                                                  pairs call Web1 JsonTextDecodeWithDictionaries
                                                                                                                                                                                                                                                                                                                                                        get responseContent •
                                                                                                                                                     notFound |
                                                                                                                                                                                              " not found "
                                                                                                                                                                                           " pH "
                set TextBox2 v . Text v to look up in pairs key
                                                                                                                                                                  pairs call Web1 JsonTextDecodeWithDictionaries
                                                                                                                                                                                                                                                                                                                     jsonText | get responseContent •
                                                                                                                                                     notFound ( " not found "
                                                                          TextBox1 · . Text · .
                                  call Sound1 .Play
                                 call Sound1 .Stop
when Switch1 .Changed
 do if Switch1 . On . E v true v
                  then set Web2 . Url to thttp://159.122.178.5:31562/control?command=motorOn
                                     call Web2 ▼ .Get
                                   set Web2 v . Url v to http://159.122.178.5:31562/control?command=motor... "
                                    call Web2 .Get
```

## Python code:

else:

```
(main loop):
while True:
    pHIndex = random.randint(0,13)
    pH = pHList[pHIndex]
    if pH <= 8 and pH >= 6:
        print("relax")
```

```
print("alert")

turbidity = round(random.uniform(0.1,1.0),2)

data = {'pH':pH , 'turbidity':turbidity}

print(data)

def onPublishCallBack():
    print("success")

success = deviceClient.publishEvent("lotSensor","json",data,qos=0,on_publish=onPublishCallBack)

if not success:
    print("not connected")

time.sleep(1)

deviceClient.commandCallback = myCommandCallBack
deviceClient.disconnect()
```

UI:

