Sprint - 4

Team ID: PNT2022TMID17812

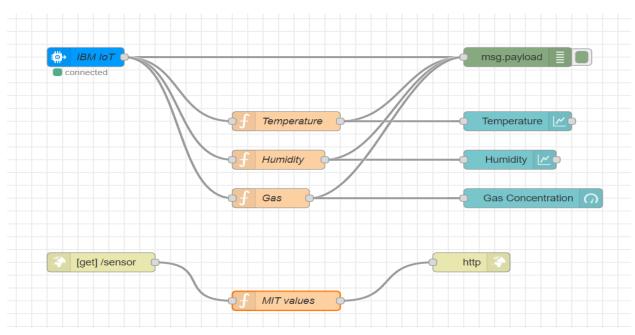
Task:

To receive the data from Node-RED to the Mobile App developed using MIT App Inventor.

Procedure:

- 1. In Node-RED **http** node is added to post the data gathered from IBM Watson IoT Platform to a webpage.
- 2. Screen 3 is developed to gather data from the website where the data is published by Node-RED.
- 3. In case of abnormal environmental conditions. An alert message is generated by MIT App.

1. Node-RED:



MIT values (Function):

This function is responsible to post the sensor data to the webpage from where the data is gathered by MIT App.

Source Code:

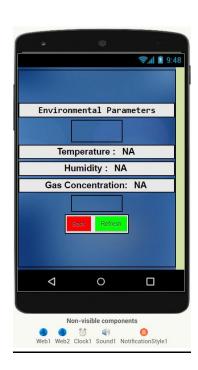
```
msg.payload = {"temp":global.get("t"), "humid":global.get("h"),
"gas":global.get("g")};
return msg;
```

2. Web page:



3. MIT App:

- 1. Blocks for screen 3 has been developed.
- 2. Blocks are capable of generating notification when,
 - a. Temperature is greater than 40°C
 - b. Humidity is greater than 30%
 - c. Concentration of gas is greater than 50%
- 3. Not only notification, this also rings an alarm whenever abnormal



Screen - 3 (Blocks):

```
when Web1 ▼ .GotText

        url
        responseCode
        responseType
        responseContent

    set ( Text to look up in pairs key
                                                  call Web1 .JsonTextDecode
                                                                                   get responseContent
                                                                        jsonText
                                      notFound
                                                  " not found "
     set h . Text . to look up in pairs key
                                                   " humid "
                                                   call Web1 JsonTextDecode
                                                                         jsonText
                                                                                    get responseContent •
                                      notFound
                                                   " not found "
     set g . Text to look up in pairs key
                                                   " gas "
                                                   call Web1 JsonTextDecode
                                           pairs 🌘
                                                                        jsonText
                                                                                    get responseContent •
                                      notFound ( not found "
     if
                 t v . Text v > v
                                       40
           call Sound1 ▼ .Play
            call NotificationStyle1 .SimpleNotification
                                                         Alert "
                                              subtitle
                                                        " High Temperature Alert
                                              bigText
                                                       true 🔻
                                           startValue
                                                        " 11 "
                                                       0
     if
                 h v . Text v > v
                                        30
     then
           call Sound1 .Play
            call NotificationStyle1 .SimpleNotification
                                                 title
                                                         Alert "
                                             subtitle
                                                        " (High Humidity Alert) "
                                             bigText
                                                       true 🔻
                                           startValue
                                                        " Alert
     if
                 g v . Text v > v
                                       50
           call Sound1 .Play
           call NotificationStyle1 .SimpleNotification
                                                 title
                                                         Alert '
                                             subtitle
                                                        " High Gas Concenteration Alert
                                              bigText
                                                       true 🔻
                                           startValue
                                                        " Alert
                                                  id
```

```
when Clock1 v. Timer

do set Web1 v. Url v to ( "https://node-red-owqrp-2022-10-06.au-syd.mybluem... "

call Web1 v. Get

when Button1 v. Click

do open another screen screenName ( Screen2 v

when Button2 v. Click

do set Web1 v. Url v to ( "https://node-red-owqrp-2022-10-06.au-syd.mybluem... "

call Web1 v. Get
```

These above written blocks are responsible for bringing the data to the mobile app and to generate alarms incase of emergency.