Sprint-4

Team ID	PNT2022TMID16771
Project Name	Project - Industry-Specific Intelligent Fire Management System

US - 1 Create Web UI in Node- Red

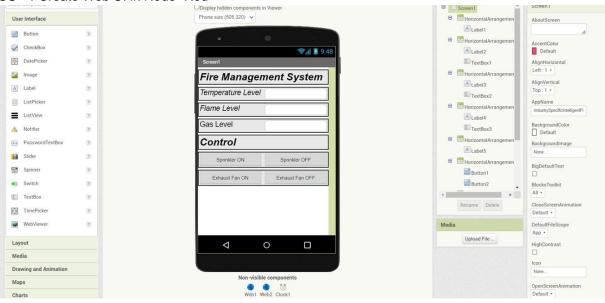


fig 1: Mobile App Layout for our project using MIT App Inventor

```
when Clock1 .Timer
           do set Web1 . Url to fittp://159.122.183.108:32627/sensor **
                            call Web1 .Get
when Web1 .GotText
 url responseCode responseType responseContent

do set TextBox1 . Text to look up in pairs key "Temperature"
                                                                                                                                                                                                     pairs call Web1 JsonTextDecode
                                                                                                                                                                                                                                                                                                                            jsonText get responseContent v
                                                                                                                                                                                     notFound " not found "
                    set TextBox2 T. Text T to look up in pairs key "Flame_Level"
                                                                                                                                                                                                   pairs call Web1 JsonTextDecode
                                                                                                                                                                                                                                                                                                                               jsonText get responseContent •
                                                                                                                                                                                      notFound not found
                    set TextBox3 . Text to look up in pairs key "Gas_Level"
                                                                                                                                                                                                    pairs call Web1 JsonTextDecode
                                                                                                                                                                                                                                                                                                                              jsonText get responseContent r
                                                                                                                                                                                       notFound not found not fou
```

```
when Button1 . Click
                       to http://159.122.183.108:32627/control?command=spr....
    set Web2 . Url .
    call Web2 .Get
when Button2 Click
   set Web2 . Url
                             http://159.122.183.108:32627/control?command=spr...
                        to 🌘
    call Web2 .Get
when Button3 ... Click
    set Web2 . Url .
                             " http://159.122.183.108:32627/control?command=exh...
                        to
    call Web2 .Get
when Button4 . Click
                        to http://159.122.183.108:32627/control?command=exh...
    set Web2 . Url .
     call Web2 .Get
```

fig 2: Blocks of your MIT AI2 Companion app

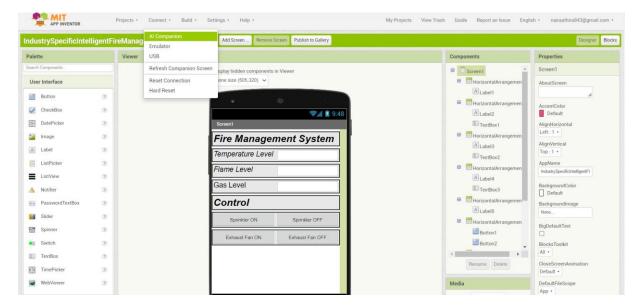


fig 3:Connecting the layout design to the mobile app MIT AI2 Companion

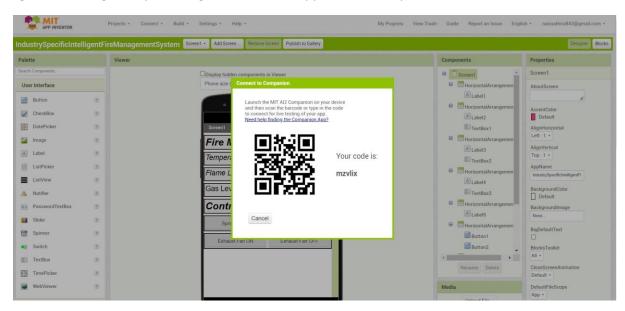


fig 4:QR code generating in the MIT App inventor



```
Published Temperature = 72 C Flame_Level = 64 % Gas_Level = 66 % to IBM Watson Command received: sprinkleron
Sprinkler is on
Published Temperature = 46 C Flame_Level = 64 % Gas_Level = 7 % to IBM Watson Command received: sprinkleroff
Sprinkler is off
Published Temperature = 65 C Flame_Level = 58 % Gas_Level = 6 % to IBM Watson Command received: exhaustfanon
Exhaust Fan ON
Published Temperature = 36 C Flame_Level = 59 % Gas_Level = 93 % to IBM Watson Command received: exhaustfanoff
Exhaust Fan OFF
Published Temperature = 19 C Flame_Level = 93 % Gas_Level = 88 % to IBM Watson Published Temperature = 47 C Flame_Level = 86 % Gas_Level = 15 % to IBM Watson Published Temperature = 97 C Flame_Level = 58 % Gas_Level = 63 % to IBM Watson Published Temperature = 97 C Flame_Level = 58 % Gas_Level = 63 % to IBM Watson
```

fig 5: random values generating in the python code

Screen1		
Fire Management System		
Temperature Level	26	
Flame Level	60	
Gas Level	96	
Control		
Sprinkler ON	Sprinkler OFF	
Exhaust Fan ON	Exhaust Fan OFF	

fig 6: the generated values are shown in MIT AI2 Companion app