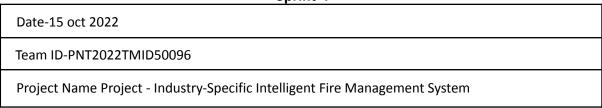
Sprint-4



Sprint-4	US-1	Create Web UI in Node- Red 10 High		Sneha K Thanalakshmi M Ramya R Santhiya V
Sprint-4	US-2	Configure the Node-RED flow to receive data from the IBM IoT platform and also use Cloudant DB nodes to store the received sensor data in the cloudant DB	10 High	Sneha K Thanalakshmi M Ramya R Santhiya V

US - 1 Create Web UI in Node- Red

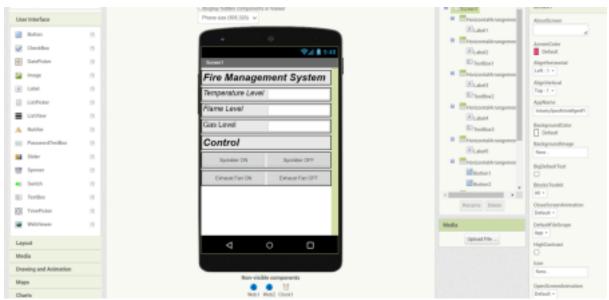


fig 1: Mobile App Layout for our project using MIT App Inventor

```
n Clock1 * Timer
         set (Web1 • . Un • to | http://159.122.183.108.32627/sensor •
         cal Web1 . Get
    when Web1 . GofText
    url responseCode responseType responseContent

to set TextBext . Text to b look up in pairs key . Temperature
                                           pairs | call (Web1 = JsonTextDecode
                                                                          get responseContent •
                                                                  json Text
                                       notFound not found *
       set ((extiliox2)) . ((ext.) to () look up in pairs key () (Flame_Level)
                                          pairs call Web1 - JsonTextDecode
                                                                  jsonText | get responseContent =
                                       notFound (not found)
       set TextBox3 . Text . to b look up in pairs key . Gas Level .
                                          pairs call Web1 JsonTextDecode
                                                                          get responseContent •
                                       notFound (not found)
when Button1 . Click
     set Web2 . Url . to
                                      http://159.122.183.108:32627/control?command=spr...
     call (Web2 * .Get
when Button2 . Click
      set Web2 *
                       Url •
                                to 🌗
                                        http://159.122.183.108:32627/control?command=spr..
      call Web2 . Get
when Button3 . Click
      set Web2 *
                       Url •
                                to I
                                         http://159.122.183.108:32627/control?command=exh...
      call Web2 . Get
when Button4 . Click
      set Web2 *
                       . Url 🔻
                                to 🌘
                                       http://159.122.183.108:32627/control?command=exh.
      call Web2 . Get
```

fig 2: Blocks of your MIT AI2 Companion app

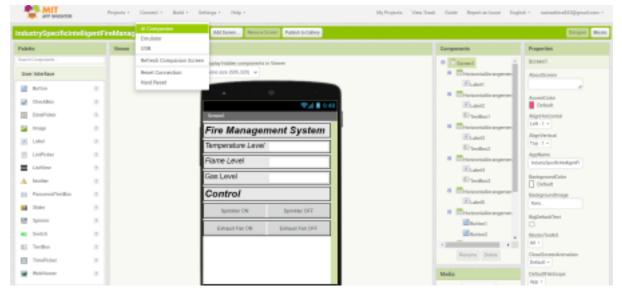


fig 3:Connecting the layout design to the mobile app MIT AI2 Companion



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
```

fig 5: random values generating in the python code

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

