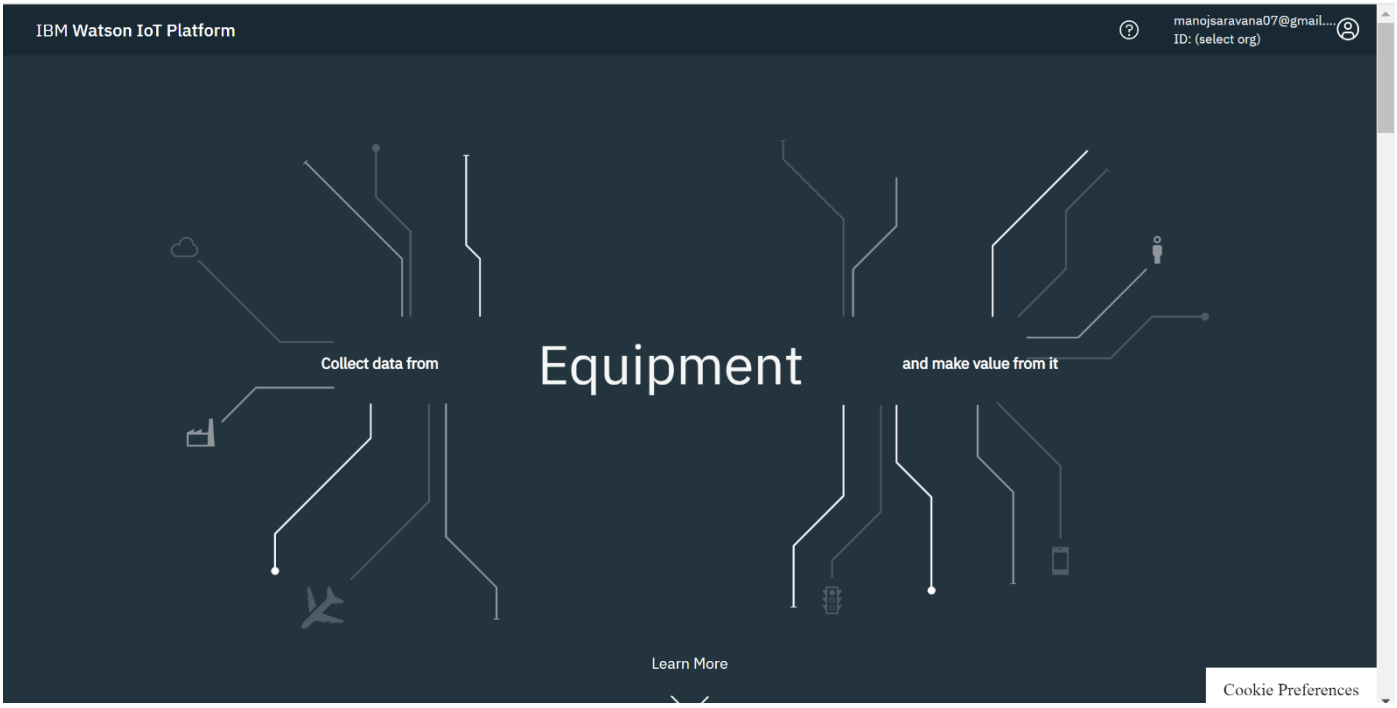
PANIMALAR ENGINEERING COLLEGE

IBM NALAIYATHIRAN

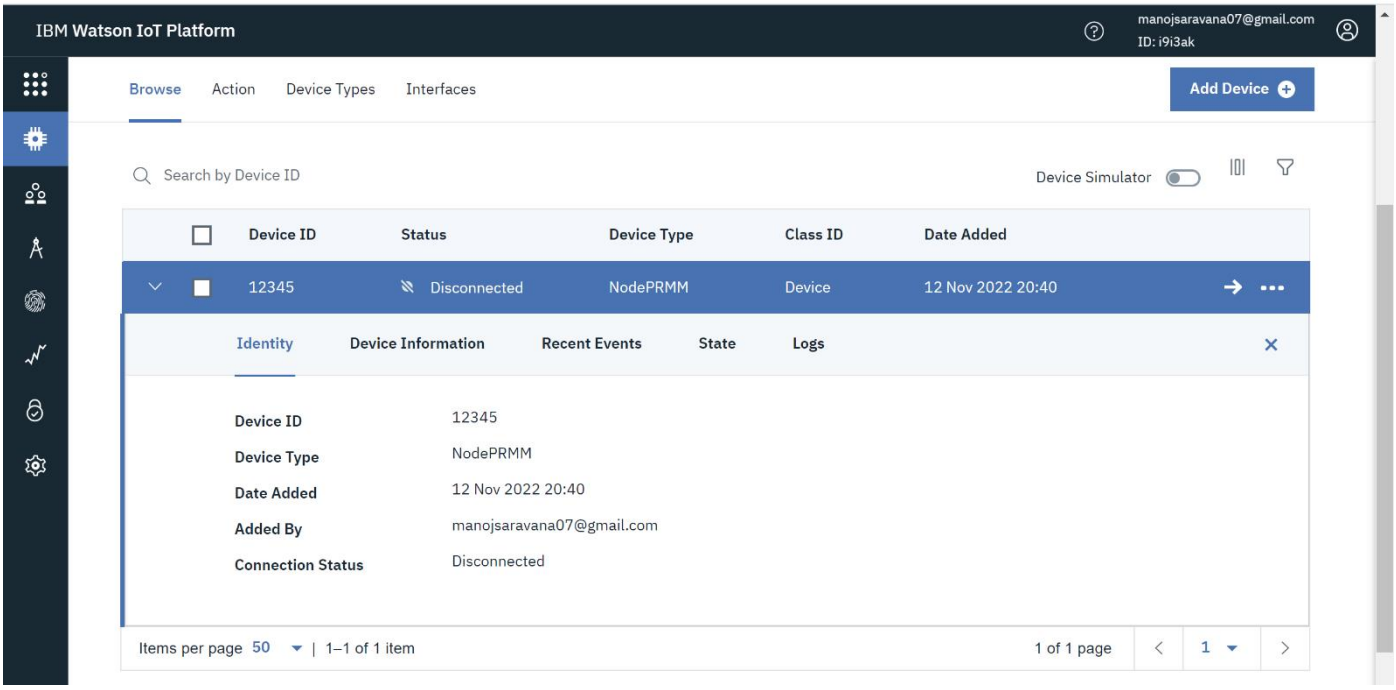
DELIVERY OF SPRINT 2

TEAM ID	**PNT2022TMID01082**
PROJECT NAME	IOT based safety gadget for child safety monitoring and notification
TEAM MEMBERS	MUKKESH B PREM KUMAR A RAGHUL S MANOJ KUMAR A S

Creating IBM Cloud Service and IBM WATSON IoT PLATFORM:



Creating and Connecting IBM cloud for Project and Python Code:



import time import sys

import ibmiotf.application

import ibmiotf.device import

random

#Provide your IBM Watson Device Credentials

organization = "0pycss" deviceType =

"weather_Device1" deviceId = "weather_deviceid"

authMethod = "token"

authToken = "(j!jK*nvh9OKQD9!dJ"

#api key {a-illza1-mbdxqo6z0s} #api

token {zSYzISuAWF&F_x7GkT}

try:

```
 deviceOptions = {"org": organization, "type": deviceType, "id": deviceId, "auth-method":
authMethod, "auth-token": authToken}  deviceCli = ibmiotf.device.Client(deviceOptions)
#.....
except Exception as e:
 print("Caught exception connecting device: %s" % str(e))  sys.exit()
# Connect and send a datapoint "hello" with value "world" into the cloud as an event of type


print("POWER ON ") print("CHECKING CONNECTION TO
IBM WATSON...")
time.sleep(2) deviceCli.connect() print("dear user ... welcome to IBM-
IOT ") print("You can know your child's live location and temperature ")
name=str(input("enter your child name:")) while True:



 temperature=random.randint(20,50)#random temperature for your child
latitude=random.uniform(10.781377,10.78643)#random latitude for your child
longitude=random.uniform(79.129113,79.134014)#random longitude for your child  a="Child
inside the geofence"  b=" Child outside the geofence"  c="High temperature"  d="Low
temperature"  x={'your_child_Zone':a}  y={'your_child_Zone':b}  z={'temp_condition':c}
w={'temp_condition':d}



 data = { 'temp' : temperature, 'lat': latitude,'lon':longitude,'name':name }
```

```
 #print data  def

myOnPublishCallback():

   print ("Published Temperature = %s C" % temperature, "latitude = %s %%" % latitude,
"longitude = %s %%" % longitude, "to IBM Watson")

   print("\n")

 success = deviceCli.publishEvent("IoTSensorgpsdata", "json", data, qos=0,
on_publish=myOnPublishCallback)

 if latitude>=10.78200 and latitude<=10.786000 and longitude >=79.130000 and longitude
<=79.133000:
deviceCli.publishEvent("IoTSensorgpsdata","json",data=x,qos=0,on_publish=myOnPublis
hCallback)

   print(x)

print("\n")  else:



deviceCli.publishEvent("IoTSensorgpsdata","json",data=y,qos=0,on_publish=myOnPublis
hCallback)

  print(y)   print("\n")



 if (temperature>35):



deviceCli.publishEvent("IoTSensorgpsdata","json",data=z,qos=0,on_publish=myOnPublis
hCallback)

     print(z)

print("\n")  else:
```

deviceCli.publishEvent("IoTSensorgpsdata","json",data=w,qos=0,on_publish=myOnPublishCallback)

print(w) print("\n")

if not success:

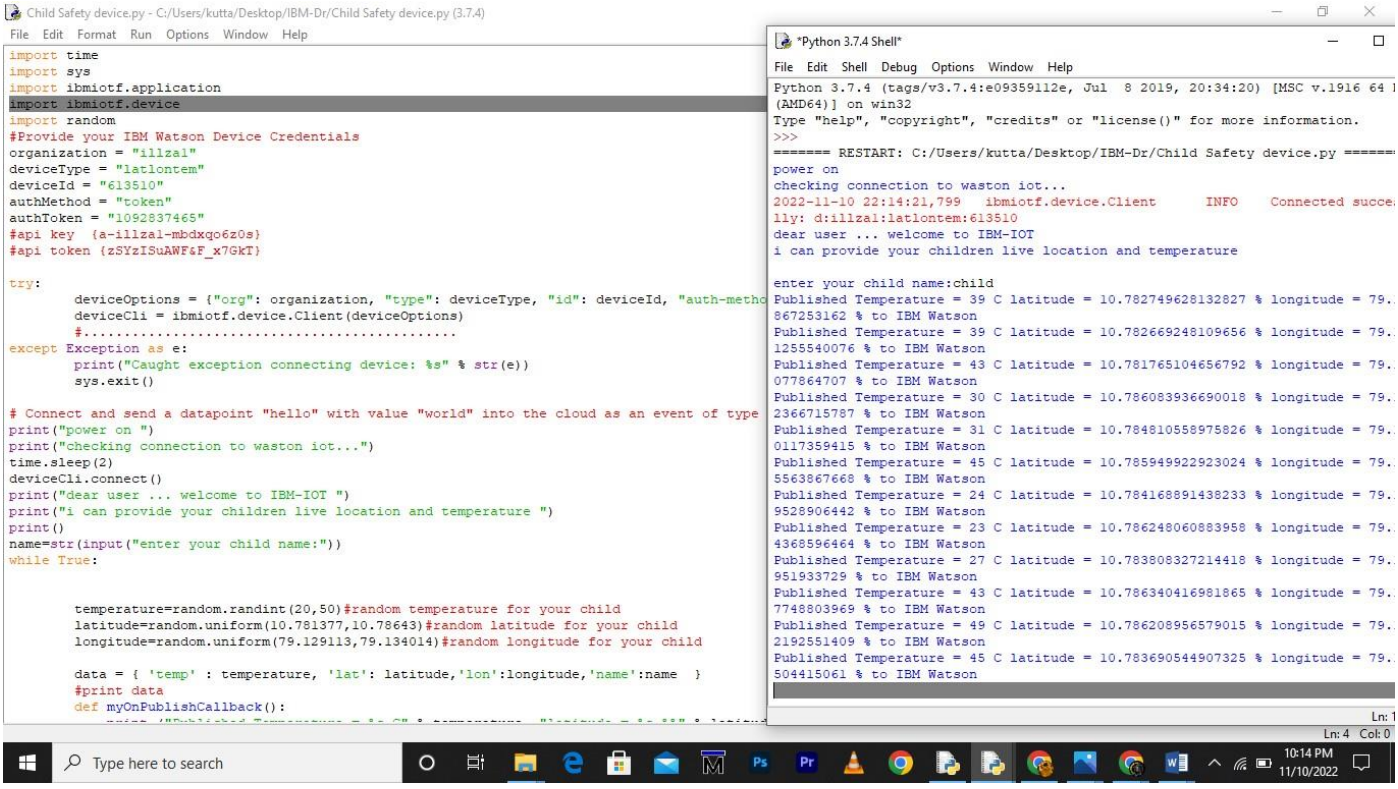
print("Not connected to

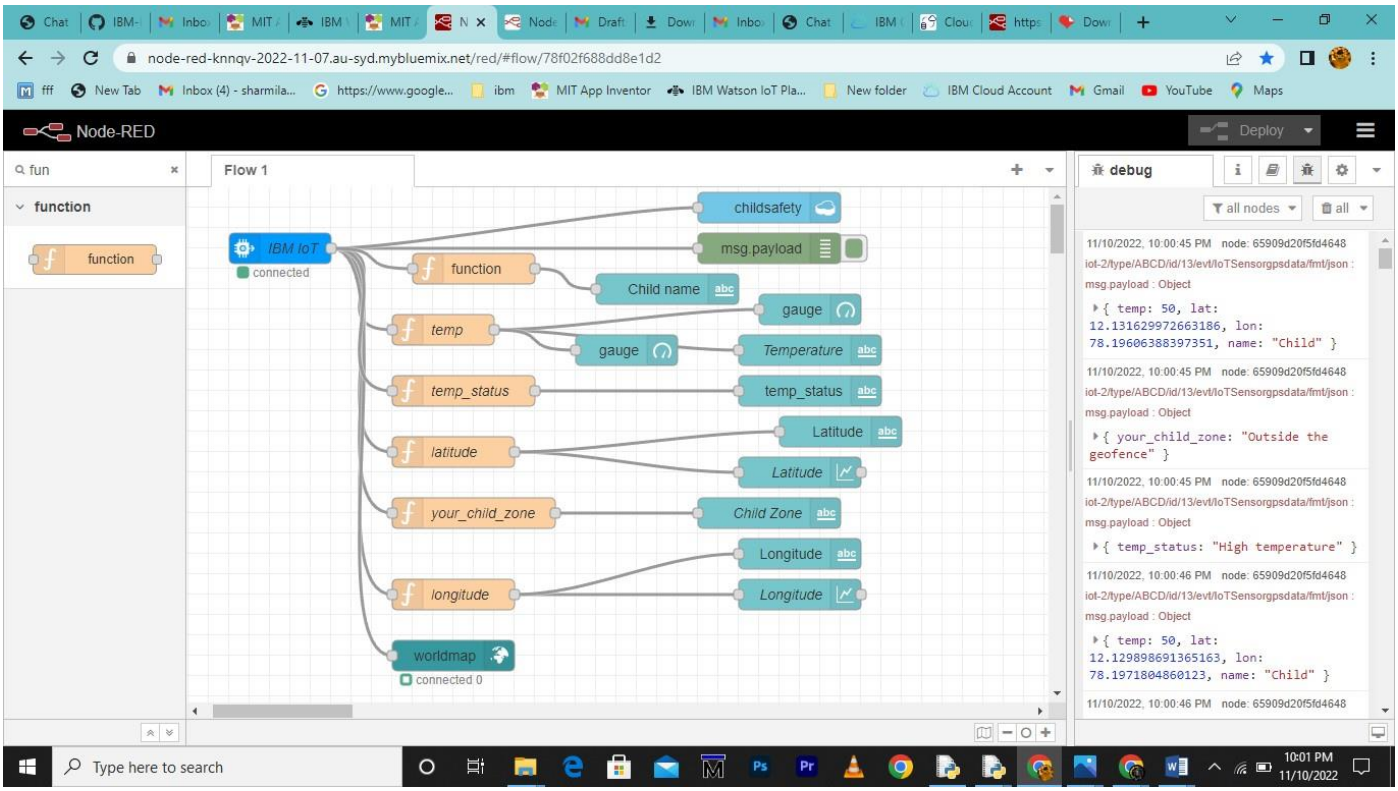
IoTF") print("\n")

time.sleep(3)

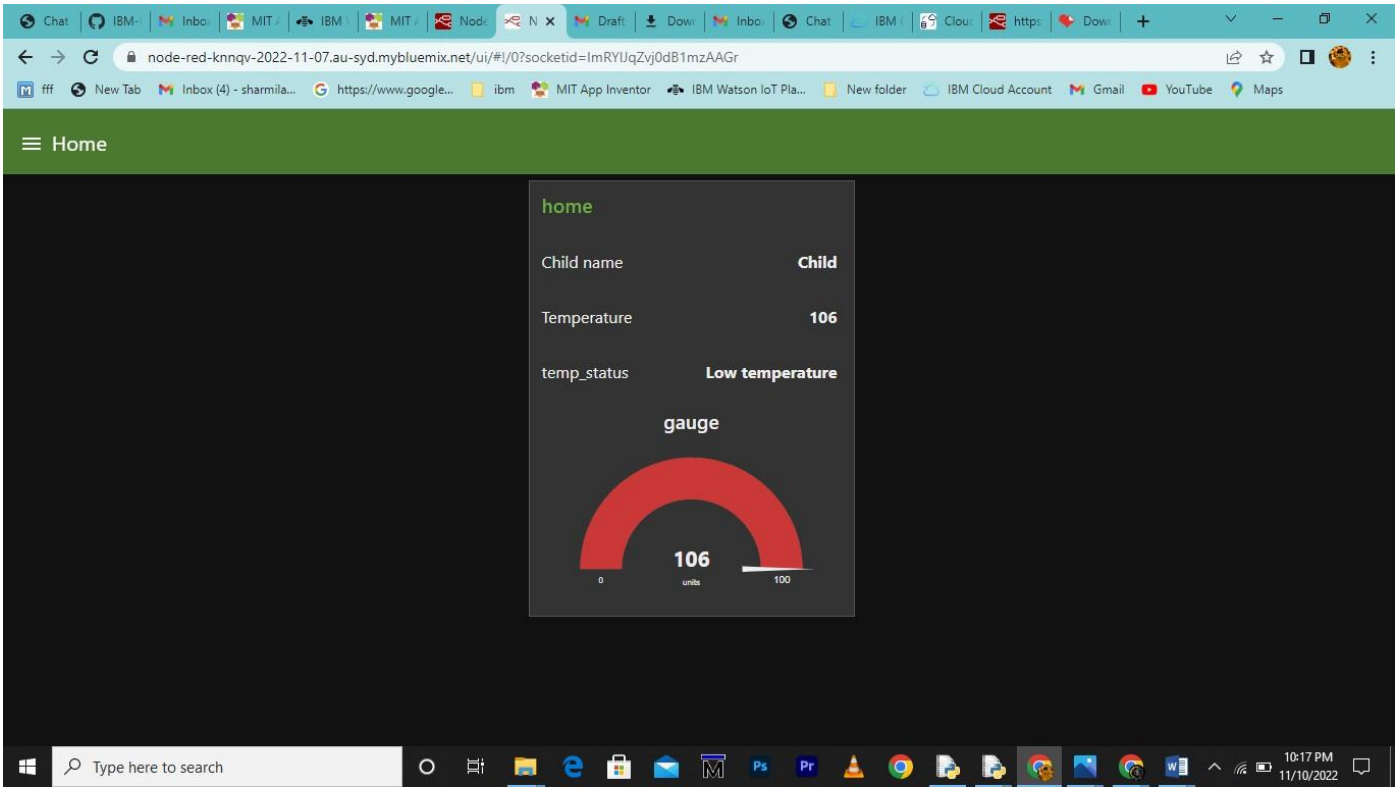
Disconnect the device and application from the cloud deviceCli.disconnect()

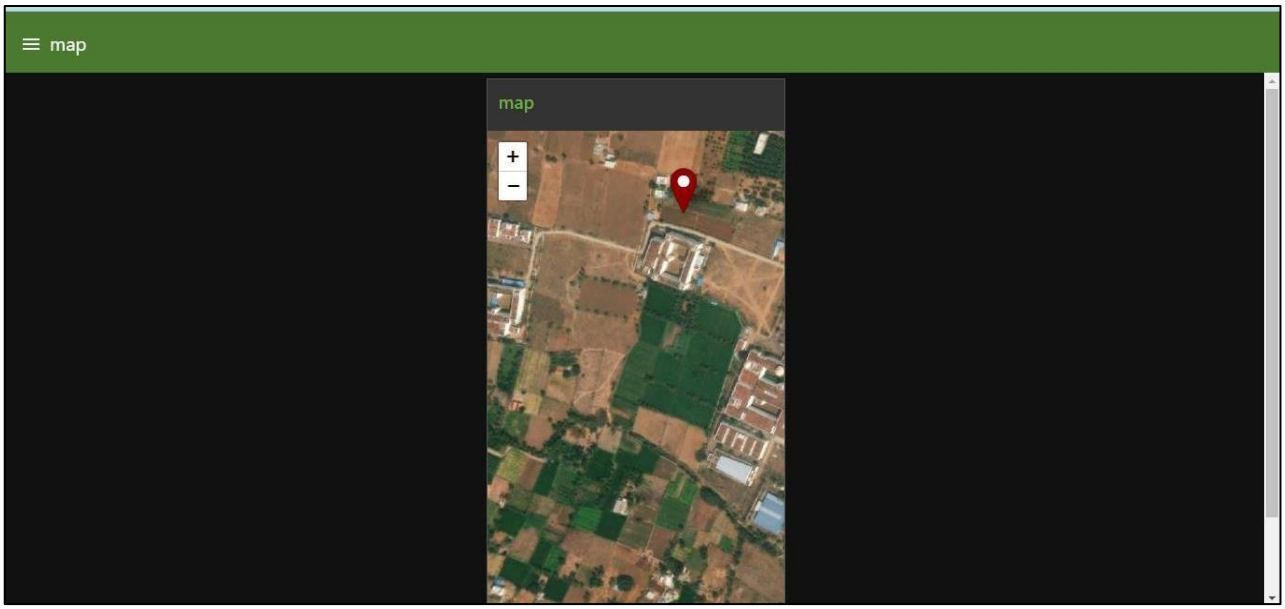
Connecting IBM Watson and python Code:





NODE-RED OUPUT:

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