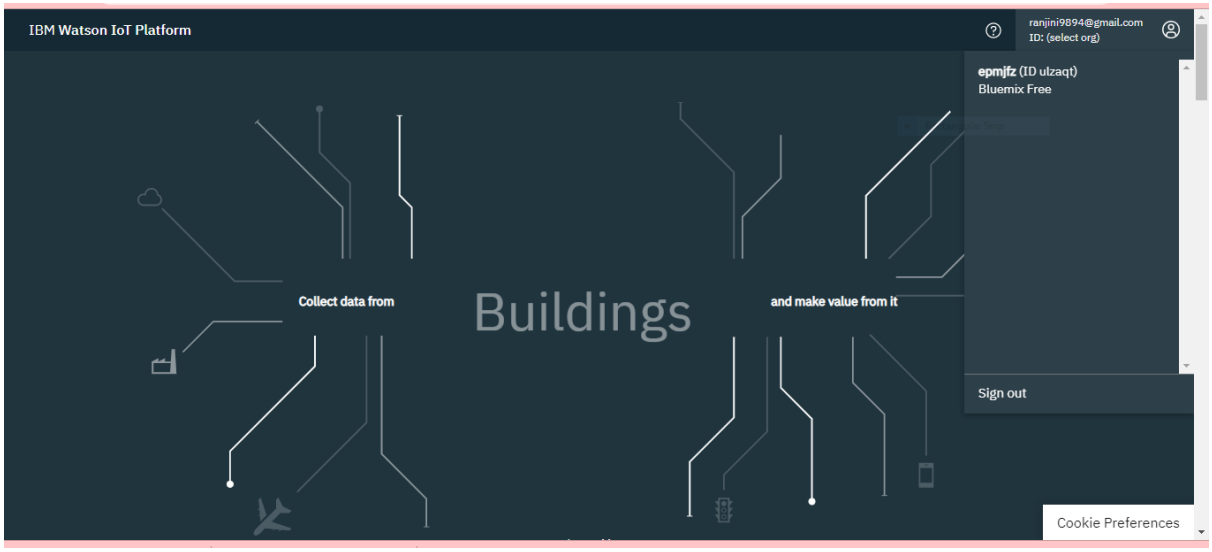
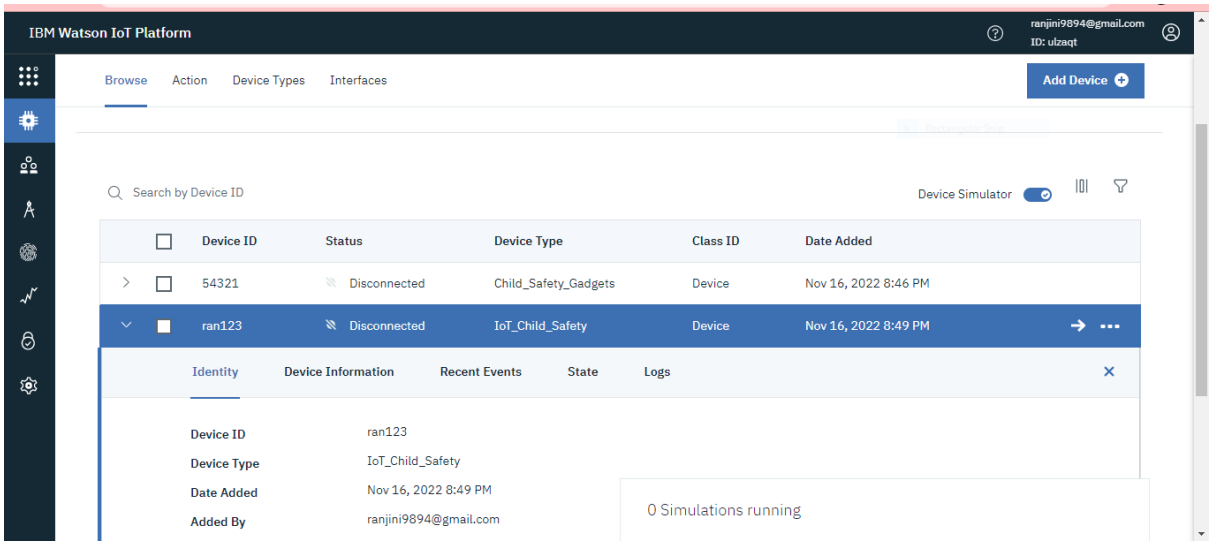
Delivery of sprint 2

Team ID	PNT2022TMID38891
Project Name	IoT Based Safety Gadget for child Safety Monitoring & Notification

Creating IBM cloud service and IBM Watson IoT platform:





Creating a Python code to connecting an IBM Iot Watson platform into Node-red services

CODE:

```
import time
import sys
import ibmiotf.application
import ibmiotf.device
import random
#Provide your IBM Watson Device Credentials
organization = "ulzaqt"
deviceType ="IoT_Child_Safety"
deviceId ="ran123"
authMethod = "token"

authToken = "12345678"
#api key {a-ulzaqt-j2zsrdru6q}
#apitoken {onj5CSs7aQ4g7Zfh5a}

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 CONNECTIONTO IBM WATSON...")
 time.sleep(2)
 deviceCli.connect()
 print("dear user ... welcome toIBM-IOT ")
 print("You can know your child's live location andtemperature ")
 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=my
OnPublishCallback)
 print(x)
 print("\n")
else:


deviceCli.publishEvent("IoTSensorgpsdata","json",data=y,qos=0,on_publish=my
OnPublishCallback)
 print(y)
 print("\n")

if (temperature>35):


deviceCli.publishEvent("IoTSensorgpsdata","json",data=z,qos=0,on_publish=my
OnPublishCallback)
 print(z)
 print("\n")
else:


deviceCli.publishEvent("IoTSensorgpsdata","json",data=w,qos=0,on_publish=my
OnPublishCallback)
 print(w)
 print("\n")
if not success:
 print("Not connectedto IoTF")
 print("\n")
 time.sleep(3)
# Disconnect the device and application from the cloud
deviceCli.disconnect()
```

Connecting IBM Watson and python code:

child.py - C:\Users\hp\Desktop\child.py (3.11.0)

File Edit Format Run Options Window Help

```
import time
import sys
import ibmiotf.application
import ibmiotf.device
import random
#Provide your IBM Watson Device Credentials
organization = "ulzaqt"
deviceType ="IoT_Child_Safety"
deviceId ="ranl23"
authMethod = "token"

authToken = "12345678"
#api key {a-ulzaqt-j2zsrdru6q}
#apitoken {onj5CSs7aQ4g7Zfh5a}

try:
 deviceOptions = {"org": organization, "type": deviceType, "id": deviceId, "auth
 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 e

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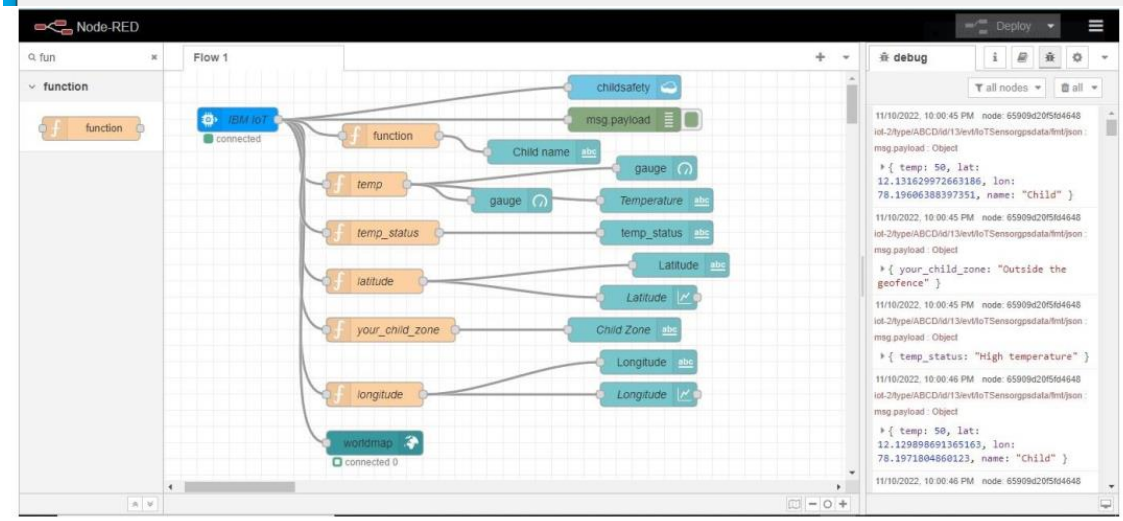

NODE-RES OUTPUT: