



**GOVERNMENT COLLEGE OF ENGINEERING
BODINAYAKKANUR, THENI**



**Safety Gadget for Child Safety Monitoring and
Notification**

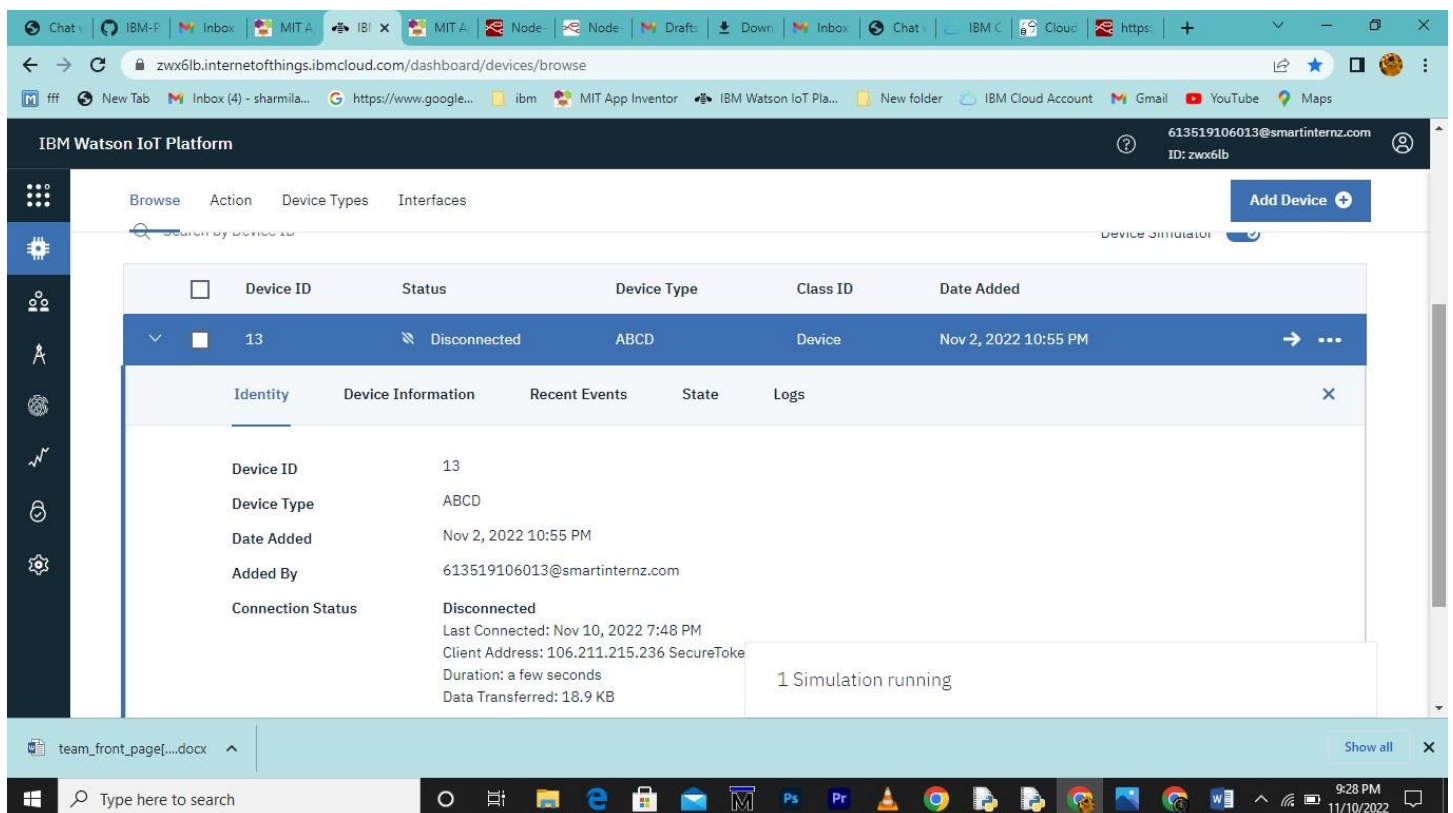
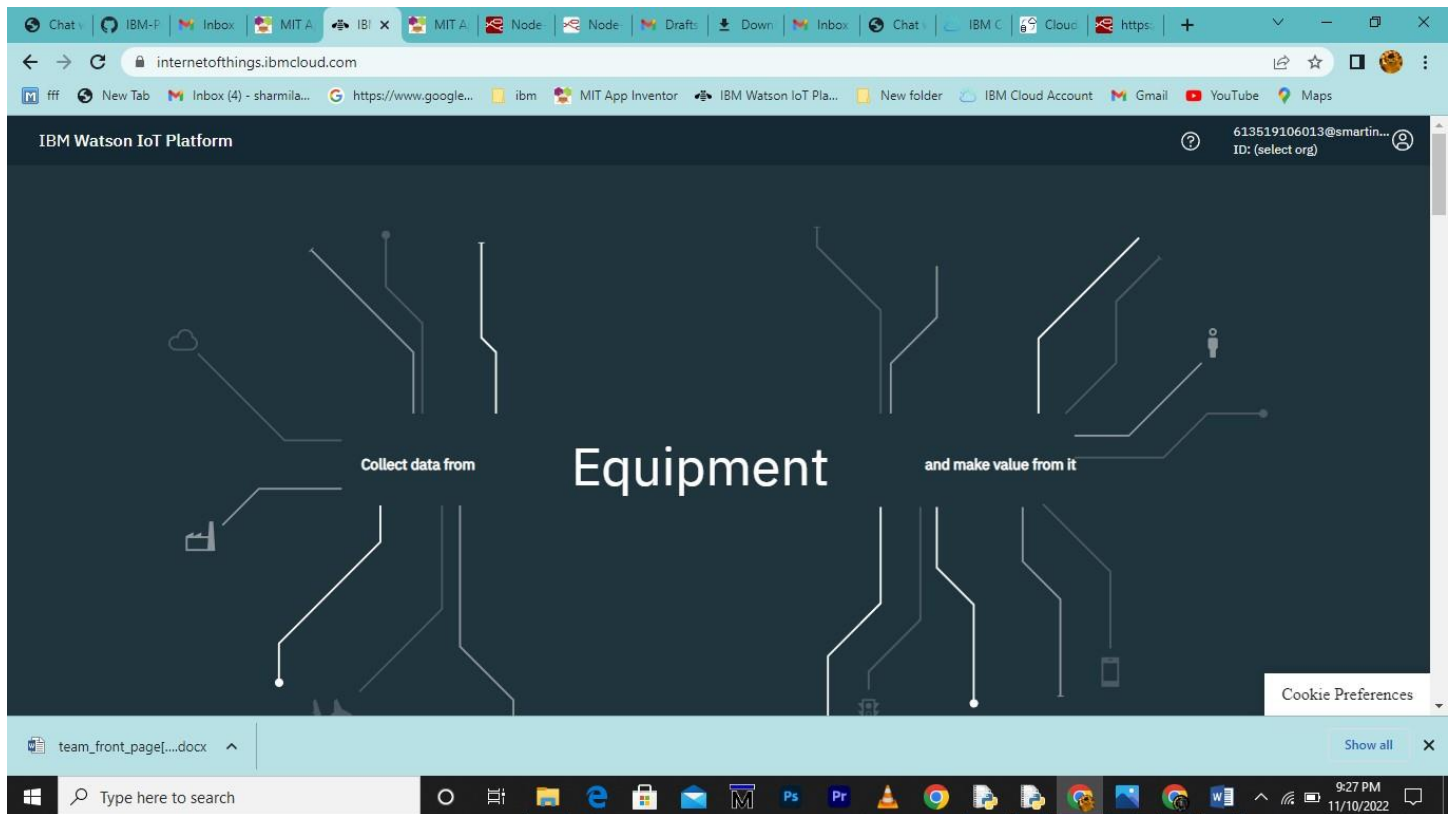
IBM NALAIYATHIRAN

Project Development –Delivery of Sprint 1

Creating and Connecting IBM cloud for Project and Python Code

TITLE	IOT based child safety gadget for child safety monitoring and notification
DOMAIN NAME	INTERNET OF THINGS
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Creating IBM Cloud Service and creating the device:



Creating Python Code:

```
import time
import sys
import ibmiotf.application
import ibmiotf.device
import random

#Provide your IBM Watson Device Credentials

organization = "zwx6lb" deviceType = "ABCD"
deviceId = "13" authMethod = "token"
authToken = "12345678"

#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
"greeting"      10      times

print("power      on      ")

print("checking connection to
```

```

waston  iot...)  time.sleep(2)
deviceCli.connect()
print("dear user ... welcome to IBM-IOT ")
print("i can provide your children live location and temperature ") print()
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=myOnPublishCallb  
ack)
```

```
    print(x)
```

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

```
deviceCli.publishEvent("IoTSensorgpsdata","json",data=y,qos=0,on_publish=myOnPublishCallb  
ack)
```

```
    print(y)
```

```
print("\n")
```

```
if (temperature>35):
```

```
deviceCli.publishEvent("IoTSensorgpsdata","json",data=z,qos=0,on_publish=myOnPublishCallb  
ack)
```

```
    print(c)
```

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

```
deviceCli.publishEvent("IoTSensorgpsdata","json",data=w,qos=0,on_publish=myOnPublishCall  
back)
```

```
    print(d)
```

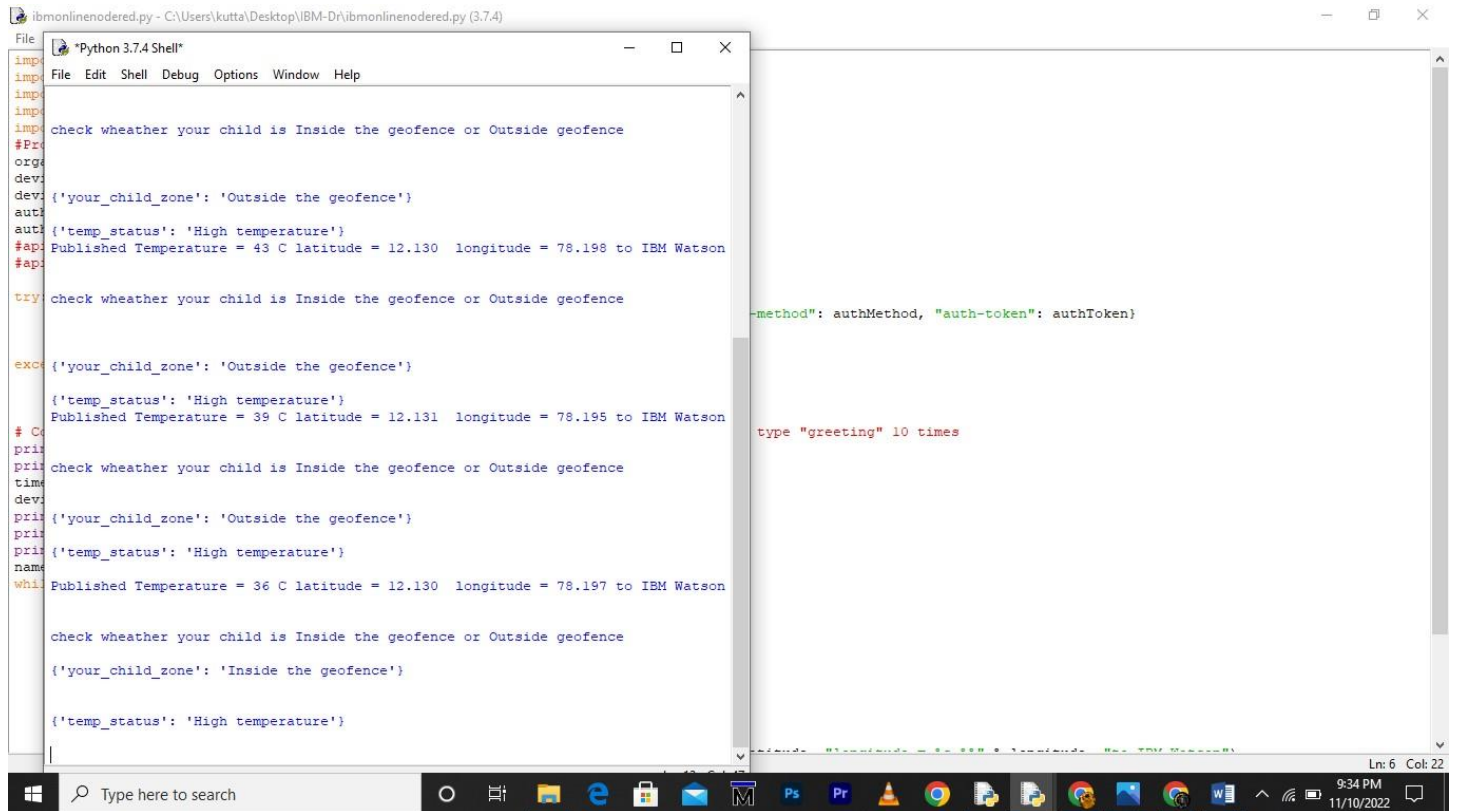
```
    print("\n")
```

```
if not success:      print("Not
connected to IoT")

print("\n")      time.sleep(3)

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

Connecting IBM Watson and python Code:



```
ibmonlinenodered.py - C:\Users\kutta\Desktop\IBM-D\ibmonlinenodered.py (3.7.4)
File Edit Shell Debug Options Window Help
import sys
import json
import requests
import time
import random
import datetime

def check_wheather your child is Inside the geofence or Outside geofence
#Pr
org
dev
dev
{
    'your_child_zone': 'Outside the geofence'
}
aut
aut
{
    'temp_status': 'High temperature'
}
#ap
#ap
Published Temperature = 43 C latitude = 12.130 longitude = 78.198 to IBM Watson

try:
    check_wheather your child is Inside the geofence or Outside geofence

except:
    {
        'your_child_zone': 'Outside the geofence'
    }
    {
        'temp_status': 'High temperature'
    }
    Published Temperature = 39 C latitude = 12.131 longitude = 78.195 to IBM Watson

# C
pri
pri
time
dev
pri
pri
{
    'your_child_zone': 'Outside the geofence'
}
pri
pri
{
    'temp_status': 'High temperature'
}
name
while
Published Temperature = 36 C latitude = 12.130 longitude = 78.197 to IBM Watson

    check_wheather your child is Inside the geofence or Outside geofence

    {
        'your_child_zone': 'Inside the geofence'
    }

    {
        'temp_status': 'High temperature'
    }

    
```

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zwx6lb.internetofthings.ibmcloud.com/dashboard/devices/browse

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IBM Watson IoT Platform613519106013@smartinternz.comID: zwx6lb

BrowseActionDevice TypesInterfacesAdd Device +

13ConnectedABCDDeviceNov 2, 2022 10:55 PM

IdentityDevice InformationRecent EventsStateLogs

The recent events listed show the live stream of data that is coming and going from this device.

Event	Value	Format	Last Received
IoTSensorgp...	{"temp_status":"High temperature"}	json	a few seconds ago
IoTSensorgp...	{"your_child_zone":"Outside the geofence"}	json	a few seconds ago
IoTSensorgp...	{"temp":50,"lat":12.132819998043411,"lon":78...	json	a few seconds ago
IoTSensorgp...	{"temp_status":"Low temperature"}	1 Simulation running	
IoTSensorgp...	{"your_child_zone":"Outside the geofence"}		

team_front_pagej....docxShow all

Type here to search9:35 PM11/10/2022