

DEVELOPING PYTHON SCRIPT

Date	29 October 2022
Team ID	PNT2022TMID08691
Project Name	Project - IOT based saftey gadget for child safety monitoring and notification

CODE :

Location data :

```
import time

import sys

import

ibmiotf.application

import ibmiotf.device

import random


# Provide your IBM

Watson

DeviceCredentials

organization = "efj778"

deviceType = "node"

deviceId = "1234"

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(dev
iceOptions)
#
.....
.....
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(10.7813  
77, 10.78643) # random  
latitude for your child  
longitude =  
random.uniform(79.1291  
13, 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("I
```

```
oTSensorgpsdata",
```

```
"json", data, qos=0,
```

```
on_publish=myOnPublish
Callback)
if latitude >= 10.78200
and latitude <=
10.786000 and longitude
>= 79.130000 and
longitude <= 79.133000:
```

```
deviceCli.publishEvent("I
oTSensorgpsdata",
"json", data=x, qos=0,
on_publish=myOnPublish
Callback)
    print(x)
    print("\n")
else:
```

```
deviceCli.publishEvent("I
oTSensorgpsdata",
"json", data=y, qos=0,
on_publish=myOnPublish
Callback)
    print 🖱
    print("\n")
```

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

```
deviceCli.publishEvent("I
```

```
oTSensorgpsdata",
"json", data=z, qos=0,
on_publish=myOnPublish
Callback)
    print(c)
    print("\n")
else:
```

```
deviceCli.publishEvent("I
oTSensorgpsdata",
"json", data=w, qos=0,
on_publish=myOnPublish
Callback)
    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()
```