

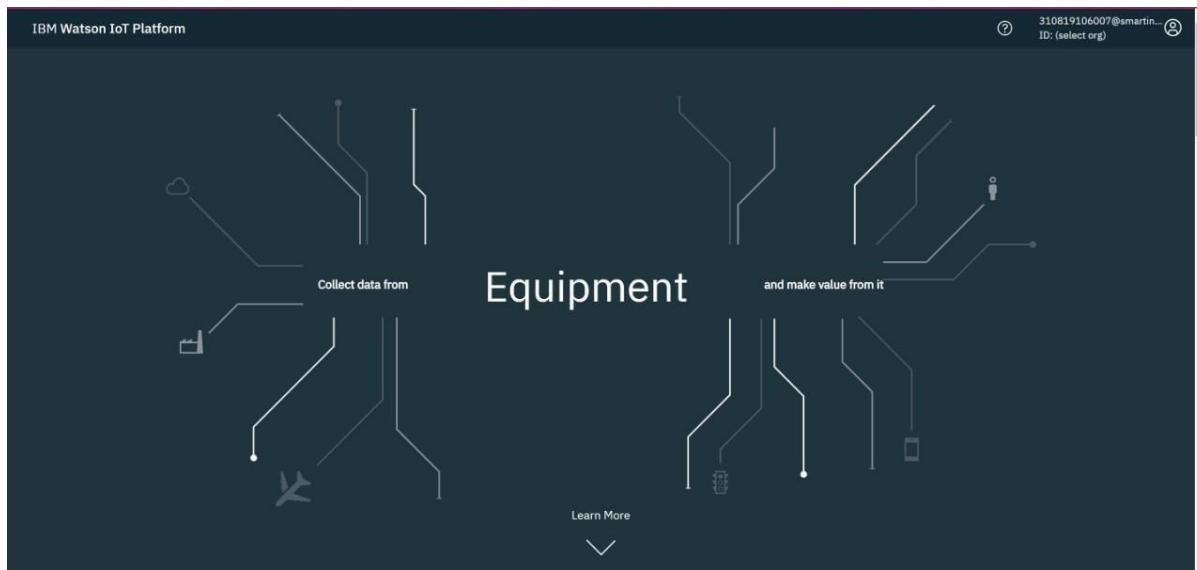
Sprint-2

IOT Based Safety Gadget for Child Safety Monitoring & Notification

TEAM ID: PNT2022TMID06213

Creating and Connecting IBM cloud for Project and Python Code

Creating IBM Cloud Service and creating the device:



The screenshot shows the IBM Watson IoT Platform Device Management page. The top navigation bar includes "Browse", "Action", "Device Types", and "Interfaces". A search bar at the top says "Search by Device ID". On the left is a sidebar with icons for device management. The main area displays a table of devices. One row is selected, showing details for a device with ID 12345, which is connected and added on Oct 29, 2022. The table columns are: Device ID, Status, Device Type, Class ID, Date Added, and Descriptive Location. Below the table, there's a detailed view of the device's identity, including its ID, type, connection status, and logs. At the bottom, there are pagination controls ("Items per page: 50") and a note ("1 Simulation running").

Creating Python Code:

```
import json
import wiotp.sdk.device
import time
import random
myConfig = {
    "identity":{
        "orgId": "4o1qxb",
        "typeId": "TestDeviceType",
        "deviceId": "12345"
    },
    "auth": {
        "token": "pnhXvzN-sWMKv&hxyi"
    }
}
client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
client.connect()

while True:
    name= "Smartbridge"
    #in area location

    latitude= 17.4225176
    longitude= 78.5458842

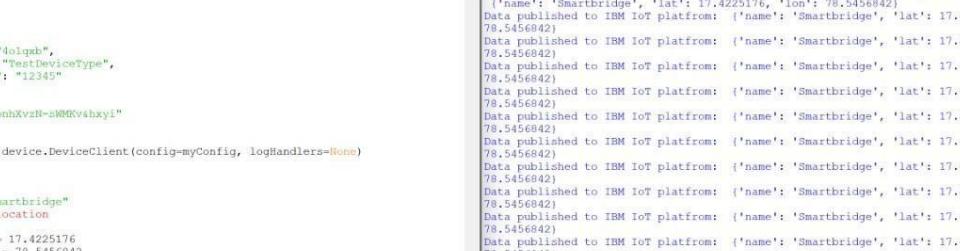
    #out area location

    #latitude= 17.4219272
    #longitude= 78.5488783
    myData={ 'name': name,'lat':latitude, 'lon' :longitude }
    client.publishEvent(eventId="status", msgFormat="json", data=myData,
qos=0, onPublish=None)
    print("Data Published to IBM IoT platform: ", myData)
    time.sleep(5)

client.disconnect()
```

Connecting IBM Watson and python Code:

In-Area Location:



```
child.py - C:\Users\Anu\AppData\Local\Programs\Python\Python37\child.py (3.7.0)
File Edit Format Run Options Window Help
import json
import wiotp.sdk.device
import time
myConfig = {
    "identity": {
        "orgId": "4olqxb",
        "typeId": "testDeviceType",
        "deviceId": "12345"
    },
    "auth": {
        "token": "pnhXvzh-nWMKv6hxyi"
    }
}
client= wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
client.connect()

while True:
    name = "Smartbridge"
    #in area location
    latitude = 17.4225176
    longitude = 78.5456842

    #out area location
    #latitude 17.4219272
    #longitude 78.5488783
    myData={"name": name, "lat":latitude, "lon": longitude}
    client.publishEvent (eventId="status", msgFormat="json", data=myData, qos=0, on
    print("Data published to IBM IoT platform: ",myData)
    time.sleep(5)

client.disconnect()
```

The screenshot shows the IBM Watson IoT Platform interface. At the top, there's a navigation bar with 'IBM Watson IoT Platform' on the left, a help icon, and user information on the right. Below the navigation bar is a header with 'Browse', 'Action', 'Device Types', and 'Interfaces' buttons, and an 'Add Device' button on the far right.

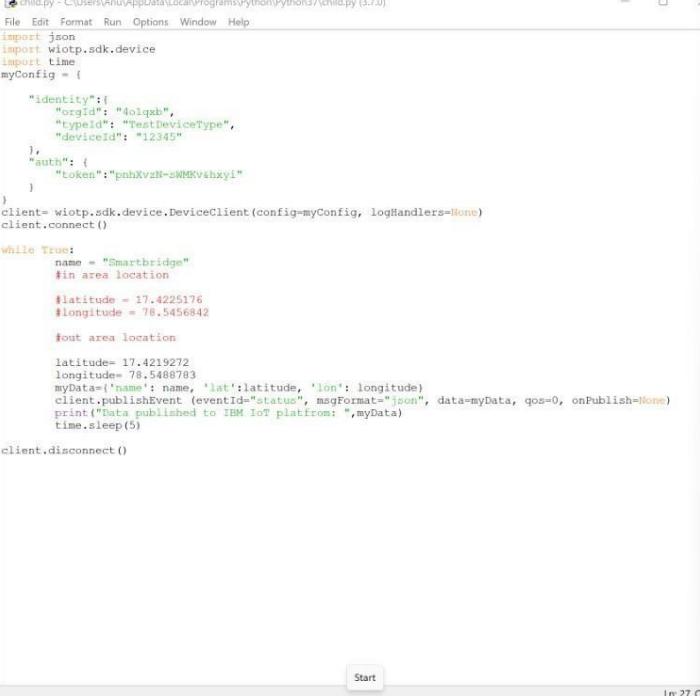
The main content area displays a device card for a 'TestDeviceType' device. The card includes fields for 'Device ID' (12345), 'Status' (Connected), 'Device Type' (TestDeviceType), 'Class ID' (Device), 'Date Added' (Oct 29, 2022 12:42 PM), and 'Descriptive Location'. Below the card is a navigation bar with tabs: 'Identity', 'Device Information' (which is selected), 'Recent Events', 'State', and 'Logs'. An 'X' button is located at the end of this bar.

A message below the tabs states: 'The recent events listed show the live stream of data that is coming and going from this device.' Below this message is a table showing recent events:

Event	Value	Format	Last Received
event_1	{"name": "smartbridge", "lat": 17.4219272, "lon": 7...	json	a few seconds ago
status	{"name": "Smartbridge", "lat": 17.4225176, "lon": 7...	json	a few seconds ago
event_1	{"name": "smartbridge", "lat": 17.4219272, "lon": 7...	json	a few seconds ago
event_1	{"name": "smartbridge", "lat": 17.4219272, "lon": 7...	json	a few seconds ago
status	{"name": "Smartbridge", "lat": 17.4225176, "lon": 7...	json	a few seconds ago

In the bottom right corner of the main content area, there's a message: '1 Simulation running'.

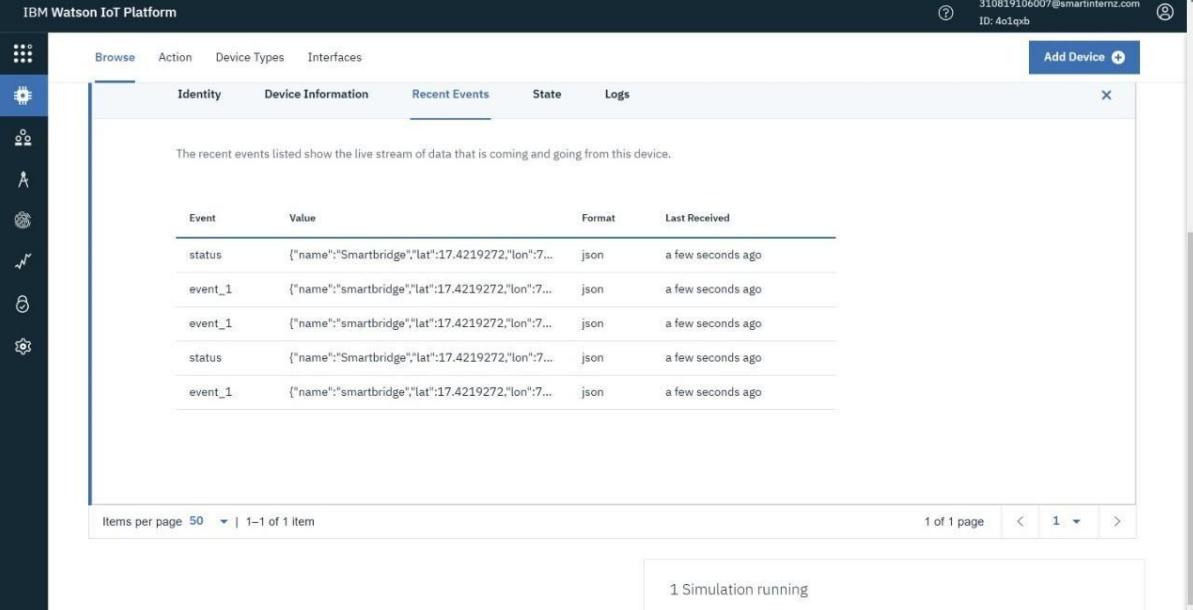
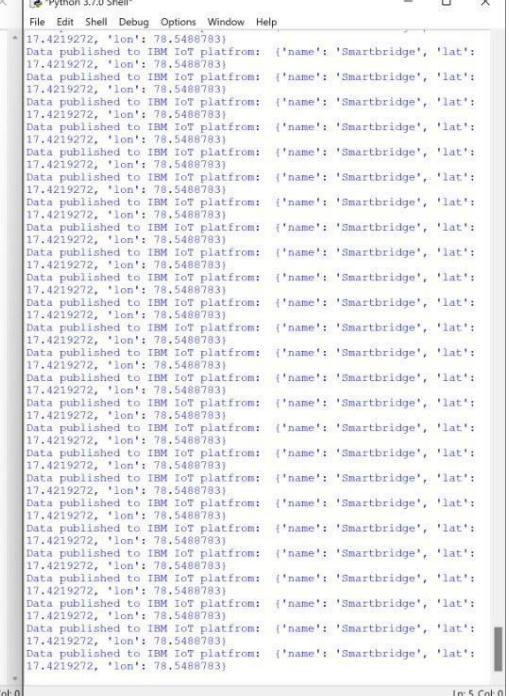
Out-Area Location:



```
child.py - C:\Users\Anu\AppData\Local\Programs\Python\Python37\child.py (3.7.0)
File Edit Format Run Options Window Help
import json
import wiotp.sdk.device
import time
myConfig = {
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    "auth": {
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    }
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client= wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
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while True:
    name = "Smartbridge"
    #in area location
    #latitude = 17.4225176
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    #out area location
    latitude= 17.4219272
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    myData={'name': name, 'lat':latitude, 'lon': longitude}
    client.publishEvent (eventId="status", msgFormat="json", data=myData, qos=0, onPublish=None)
    print("Data published to IBM IoT platform:",myData)
    time.sleep(5)

client.disconnect()
```



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

Event	Value	Format	Last Received
status	{"name": "Smartbridge", "lat": 17.4219272, "lon": 78.5488783}	json	a few seconds ago
event_1	{"name": "smartbridge", "lat": 17.4219272, "lon": 78.5488783}	json	a few seconds ago
event_1	{"name": "smartbridge", "lat": 17.4219272, "lon": 78.5488783}	json	a few seconds ago
status	{"name": "Smartbridge", "lat": 17.4219272, "lon": 78.5488783}	json	a few seconds ago
event_1	{"name": "smartbridge", "lat": 17.4219272, "lon": 78.5488783}	json	a few seconds ago

Items per page: 50 | 1-1 of 1 item

1 Simulation running