

Project Development –Delivery plan sprint-2

IoT Based Safety Gadget for Child Safety Monitoring & Notification

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Creating and Connecting IBM cloud for Project and Python Code

Creating IBM Cloud Service and creating the device:

The screenshot displays the IBM Watson IoT Platform interface. The top navigation bar includes links for 'Service Details - IBM Cloud' and 'IBM Watson IoT Platform'. The main content area features a large graphic with the text 'Equipment' and 'Collect data from' and 'and make value from it'. Below this, a table lists the details of a newly added device.

Identity	Device Information	Recent Events	State	Logs
Device ID	12345			
Device Type	NodeMCU			
Date Added	12 Nov 2022 5:23 AM			
Added By	achudhan.ece19@mamcet.com			
Connection Status	Connected			
	Connection Time: 15 Nov 2022 9:42 AM			
	Client Address: 42.106.185.76 SecureToken			

The bottom of the screen shows the Windows taskbar with various application icons and the system clock indicating 09:42 on 15-11-2022.

Creating Python Code:

```

import json
import wiotp.sdk.device
import time
myConfig={
    "identity": {
        "orgId":"idajfy",
        "typeId": "NodeMCU",
        "deviceId":"12345"
    },
    "auth": {
        "token": "12345678"
    }
}
client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
client.connect()

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

    #latitude=10.99544
    #longitude=78.77988

    #out area location

    latitude=10.994131
    longitude=78.780154
    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 platfrom: ",myData)
    time.sleep(1000)

client.disconnect()

```

Connecting IBM Watson and python Code:

In-Area Location:

```
import json
import wiotp.sdk.device
import time

myConfig = {
    "orgId": "sdajfy",
    "typeId": "NodeMCU",
    "deviceId": "12345"
},
"auth": {
    "token": "12345678"
}

client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
client.connect()

while True:
    name = "childtracker"
    #in area location
    latitude = 10.99544
    longitude = 78.77988

    #out area location
    #latitude = 10.994131
    #longitude = 78.780154
    myData = {'name': name, 'lat': latitude, 'lon': longitude}
    client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=1)
    print("Data published to IBM IoT platform: ", myData)
    time.sleep(5)

client.disconnect()
```

```
om:
{'name': 'childtracker', 'lat': 10.99544, 'lon': 78.77988}
Data published to IBM IoT platform: {'name': 'childtracker', 'lat': 10.99544, 'lon': 78.77988}
2022-11-15 09:42:39,143 wiotp.sdk.device.client.DeviceClient ERROR Unexpected disconnect from IBM Watson IoT Platform: 7
2022-11-15 09:42:51,104 wiotp.sdk.device.client.DeviceClient INFO Connected successfully: d:sdajfy:NodeMCU:12345Data published to IBM IoT platform: {'name': 'childtracker', 'lat': 10.99544, 'lon': 78.77988}
Data published to IBM IoT platform: {'name': 'childtracker', 'lat': 10.99544, 'lon': 78.77988}
2022-11-15 09:42:58,287 wiotp.sdk.device.client.DeviceClient ERROR Unexpected disconnect from IBM Watson IoT Platform: 7
2022-11-15 09:43:05,248 wiotp.sdk.device.client.DeviceClient INFO Connected successfully: d:sdajfy:NodeMCU:12345Data published to IBM IoT platform: {'name': 'childtracker', 'lat': 10.99544, 'lon': 78.77988}
Data published to IBM IoT platform: {'name': 'childtracker', 'lat': 10.99544, 'lon': 78.77988}
2022-11-15 09:43:12,213 wiotp.sdk.device.client.DeviceClient ERROR Unexpected disconnect from IBM Watson IoT Platform: 7
2022-11-15 09:43:19,374 wiotp.sdk.device.client.DeviceClient INFO Connected successfully: d:sdajfy:NodeMCU:12345Data published to IBM IoT platform: {'name': 'childtracker', 'lat': 10.99544, 'lon': 78.77988}
Data published to IBM IoT platform: {'name': 'childtracker', 'lat': 10.99544, 'lon': 78.77988}
===== RESTART: C:/Users/Bad boy/Desktop/2.py =====
2022-11-15 09:43:35,507 wiotp.sdk.device.client.DeviceClient INFO Connected successfully: d:sdajfy:NodeMCU:12345Data published to IBM IoT platform: {'name': 'childtracker', 'lat': 10.99544, 'lon': 78.77988}
Data published to IBM IoT platform: {'name': 'childtracker', 'lat': 10.99544, 'lon': 78.77988}
2022-11-15 09:43:42,514 wiotp.sdk.device.client.DeviceClient ERROR Unexpected disconnect from IBM Watson IoT Platform: 7
```

Event	Value	Format	Last Received
status	{ "name": "childtracker", "lat": 10.994131, "lon": 78.780154 }	json	a few seconds ago
status	{ "name": "childtracker", "lat": 10.99544, "lon": 78.77988 }	json	a few seconds ago
status	{ "name": "childtracker", "lat": 10.99544, "lon": 78.77988 }	json	a few seconds ago
status	{ "name": "childtracker", "lat": 10.994131, "lon": 78.780154 }	json	a few seconds ago
status	{ "name": "childtracker", "lat": 10.994131, "lon": 78.780154 }	json	a minute ago

Out-Area Location:

