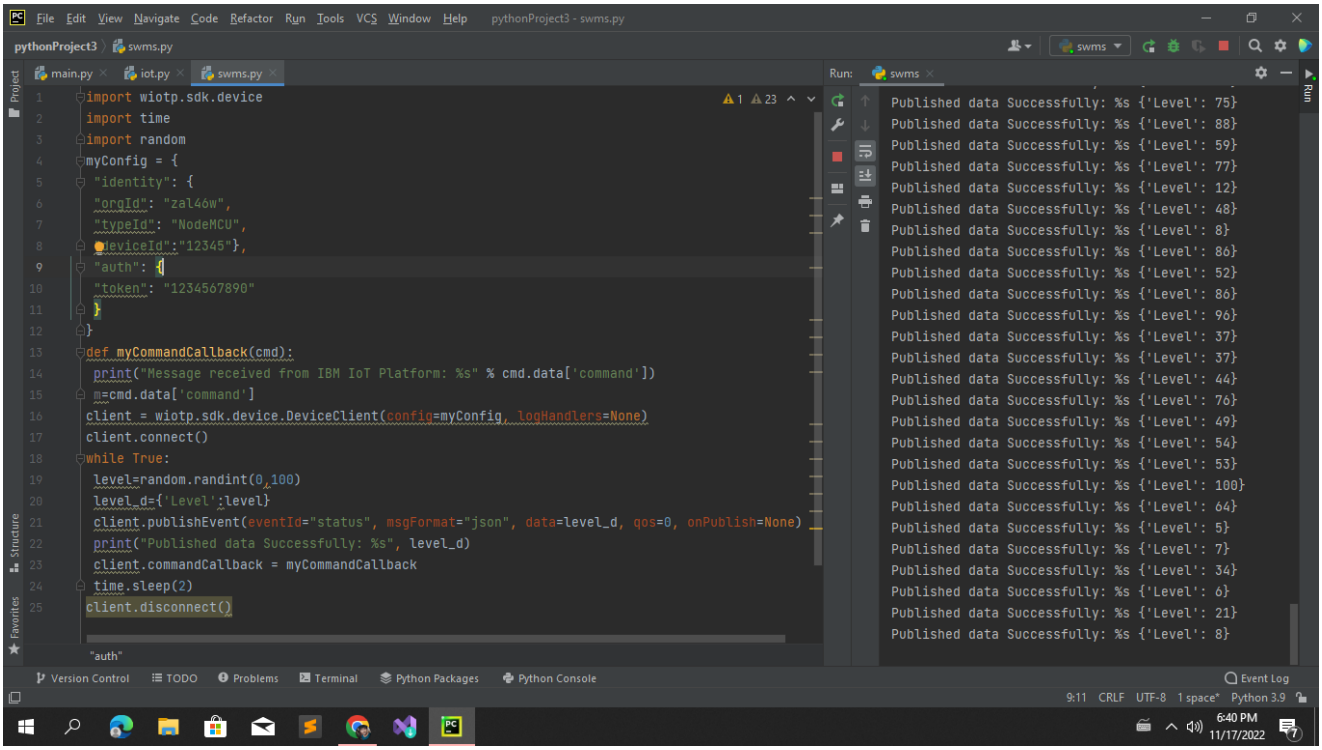
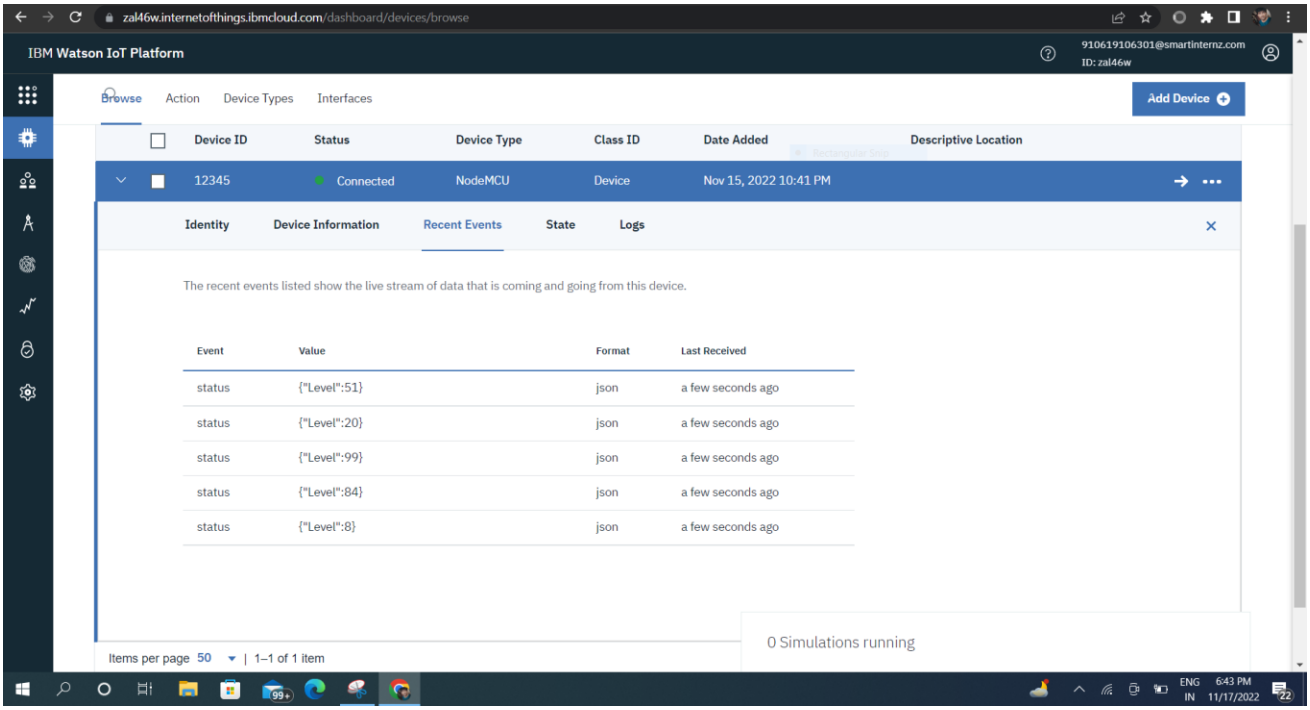
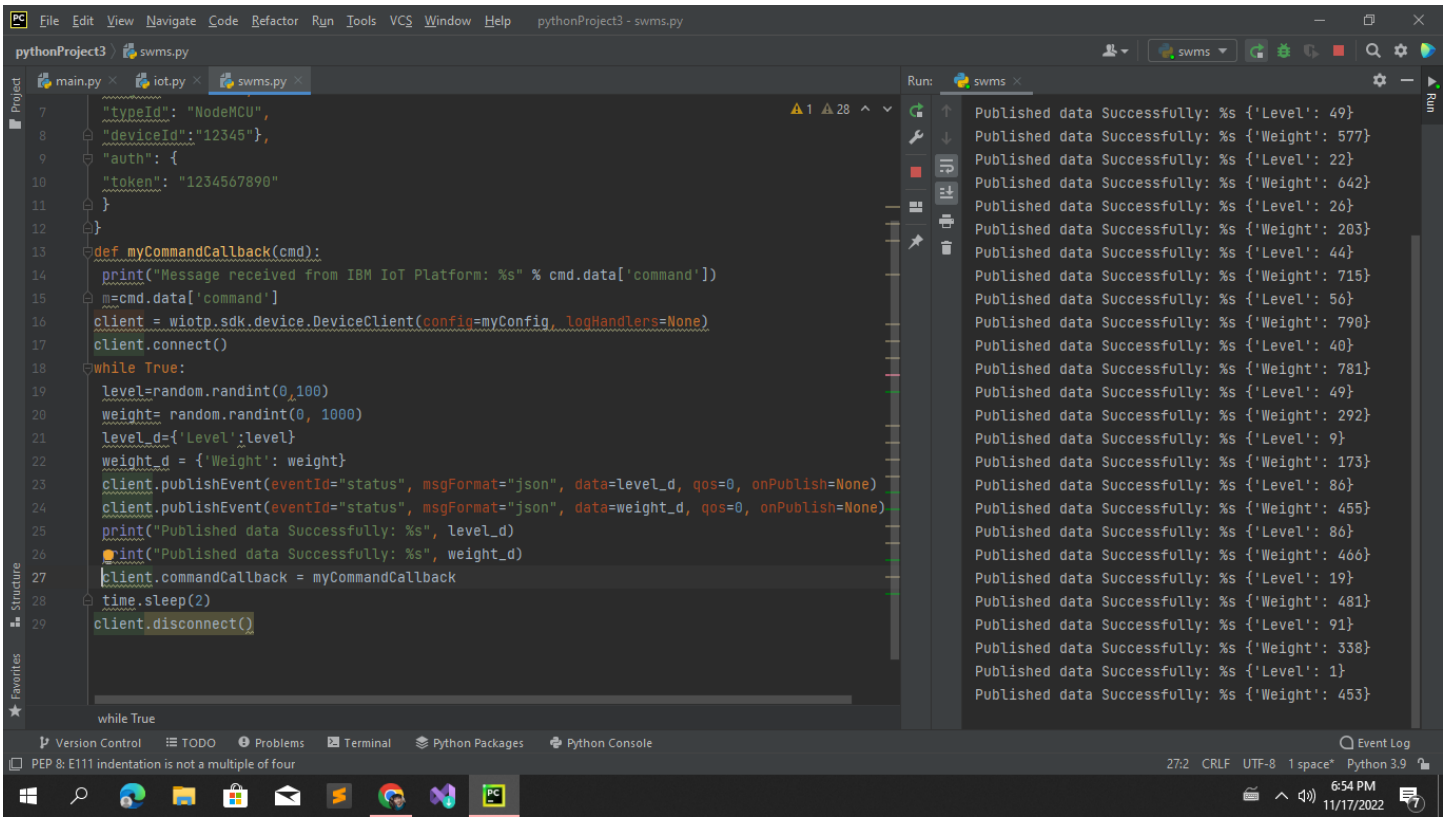
SPRINT-1

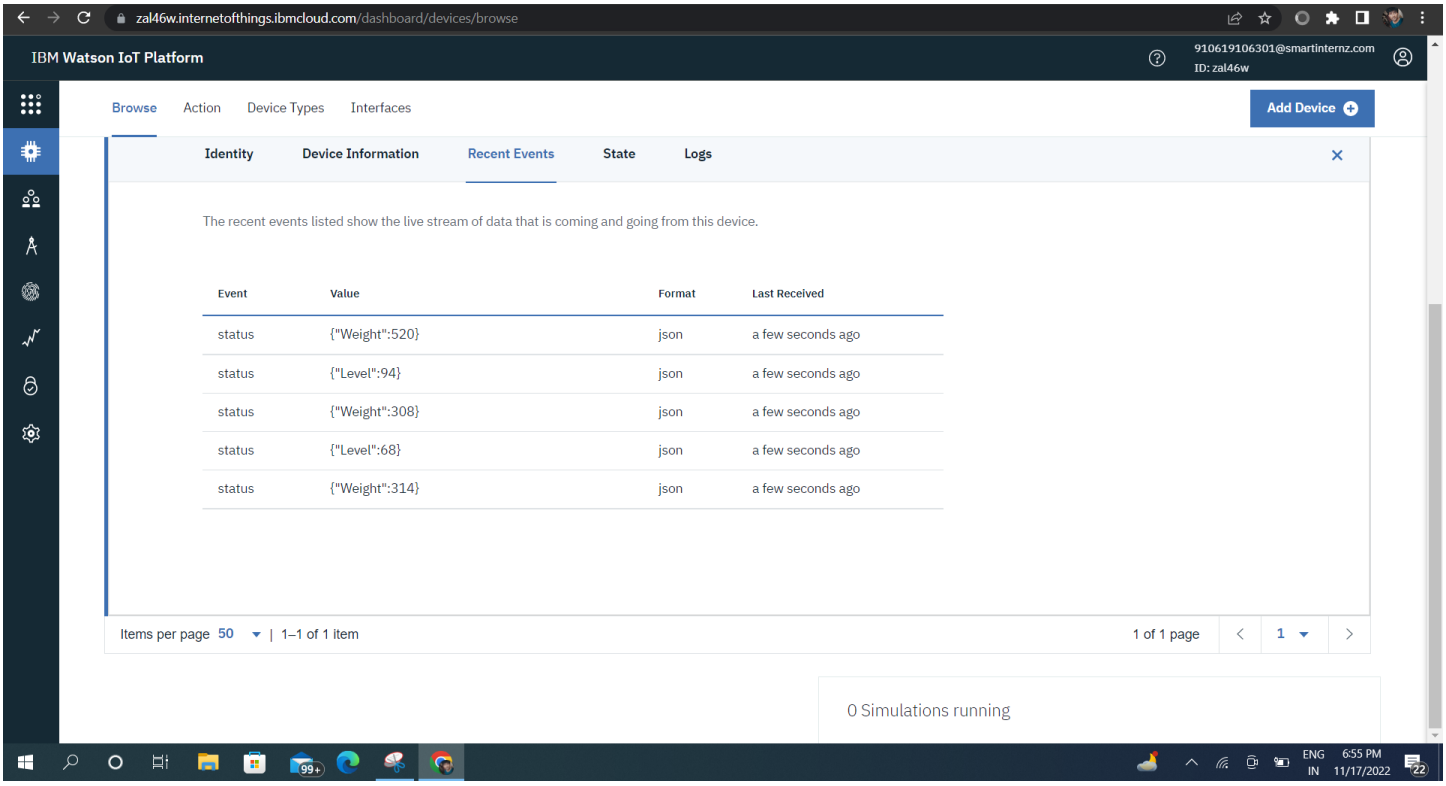
Date	17 November 2022
Team ID	PNT2022TMID11549
Project Name	Smart Waste Management System For Metropolitan Cities

*creating python script and publish data to ibm watson






File Edit View Navigate Code Refactor Run Tools VCS Window Help pythonProject3 - swms.py
pythonProject3 swms.py
main.py iot.py swms.py
"typeId": "NodeMCU",
"deviceId":"12345"},
"auth": {
"token": "1234567890"
}
}
def myCommandCallback(cmd):
print("Message received from IBM IoT Platform: %s" % cmd.data['command'])
m=cmd.data['command']
client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
client.connect()
while True:
level=random.randint(0,100)
weight= random.randint(0, 1000)
level_d={'Level':level}
weight_d = {'Weight': weight}
client.publishEvent(eventId="status", msgFormat="json", data=level_d, qos=0, onPublish=None)
client.publishEvent(eventId="status", msgFormat="json", data=weight_d, qos=0, onPublish=None)
print("Published data Successfully: %s", level_d)
print("Published data Successfully: %s", weight_d)
client.commandCallback = myCommandCallback
time.sleep(2)
client.disconnect()
while True
Run: swms
Published data Successfully: %s {'Level': 49}
Published data Successfully: %s {'Weight': 577}
Published data Successfully: %s {'Level': 22}
Published data Successfully: %s {'Weight': 642}
Published data Successfully: %s {'Level': 26}
Published data Successfully: %s {'Weight': 203}
Published data Successfully: %s {'Level': 44}
Published data Successfully: %s {'Weight': 715}
Published data Successfully: %s {'Level': 56}
Published data Successfully: %s {'Weight': 790}
Published data Successfully: %s {'Level': 40}
Published data Successfully: %s {'Weight': 781}
Published data Successfully: %s {'Level': 49}
Published data Successfully: %s {'Weight': 292}
Published data Successfully: %s {'Level': 9}
Published data Successfully: %s {'Weight': 173}
Published data Successfully: %s {'Level': 86}
Published data Successfully: %s {'Weight': 455}
Published data Successfully: %s {'Level': 86}
Published data Successfully: %s {'Weight': 466}
Published data Successfully: %s {'Level': 19}
Published data Successfully: %s {'Weight': 481}
Published data Successfully: %s {'Level': 91}
Published data Successfully: %s {'Weight': 338}
Published data Successfully: %s {'Level': 1}
Published data Successfully: %s {'Weight': 453}
Version Control TODO Problems Terminal Python Packages Python Console
Event Log
PEP 8: E111 indentation is not a multiple of four
27:2 CRLF UTF-8 1 space* Python 3.9
6:54 PM 11/17/2022


zal46w.internetofthings.ibmcloud.com/dashboard/devices/browse
IBM Watson IoT Platform
910619106301@smartinternz.com
ID: zal46w
Browse Action Device Types Interfaces
Add Device
Identity Device Information Recent Events State Logs
The recent events listed show the live stream of data that is coming and going from this device.
Event Value Format Last Received
status {"Weight":520} json a few seconds ago
status {"Level":94} json a few seconds ago
status {"Weight":308} json a few seconds ago
status {"Level":68} json a few seconds ago
status {"Weight":314} json a few seconds ago
Items per page 50 | 1–1 of 1 item
1 of 1 page
1
0 Simulations running
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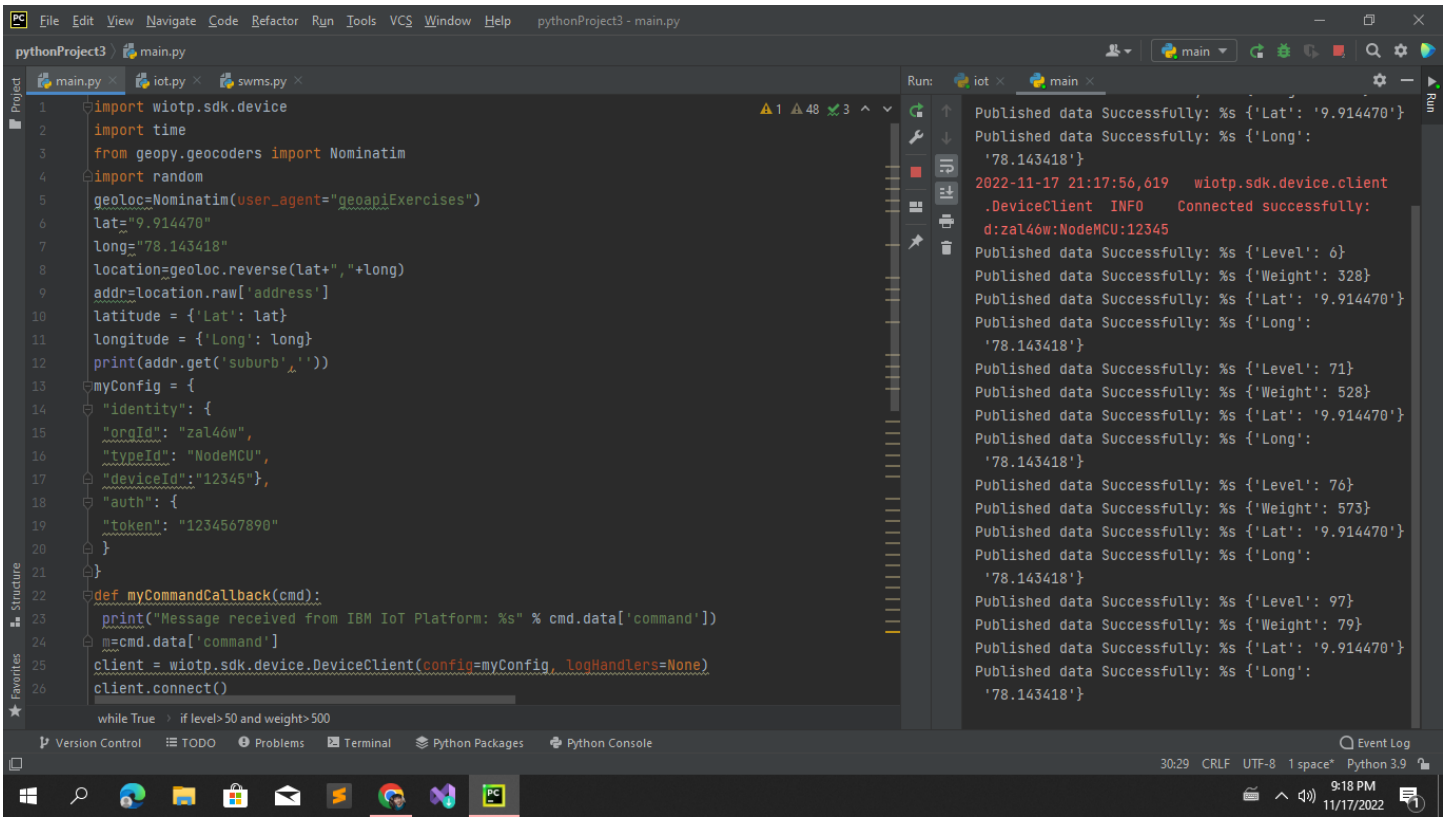
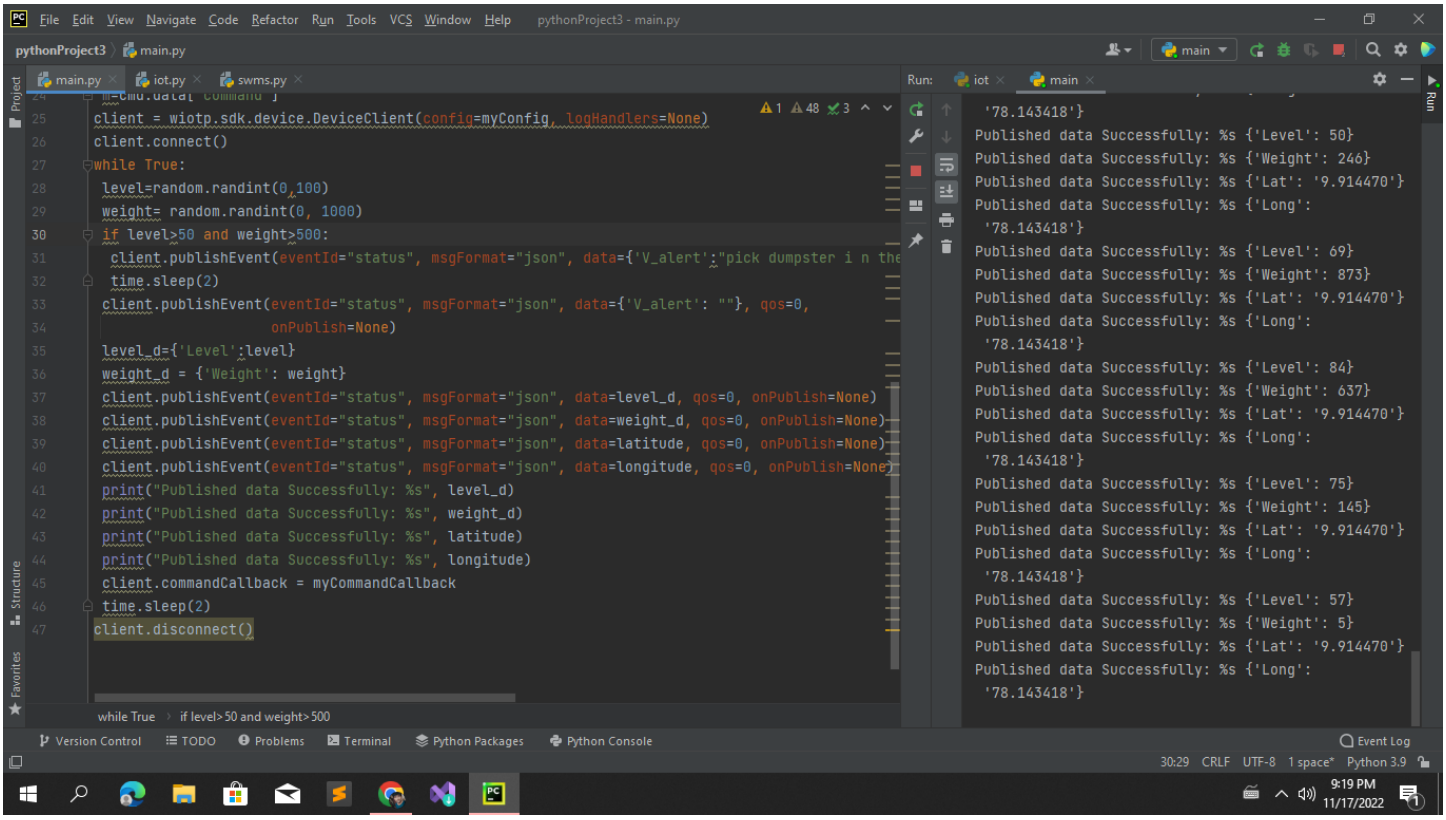
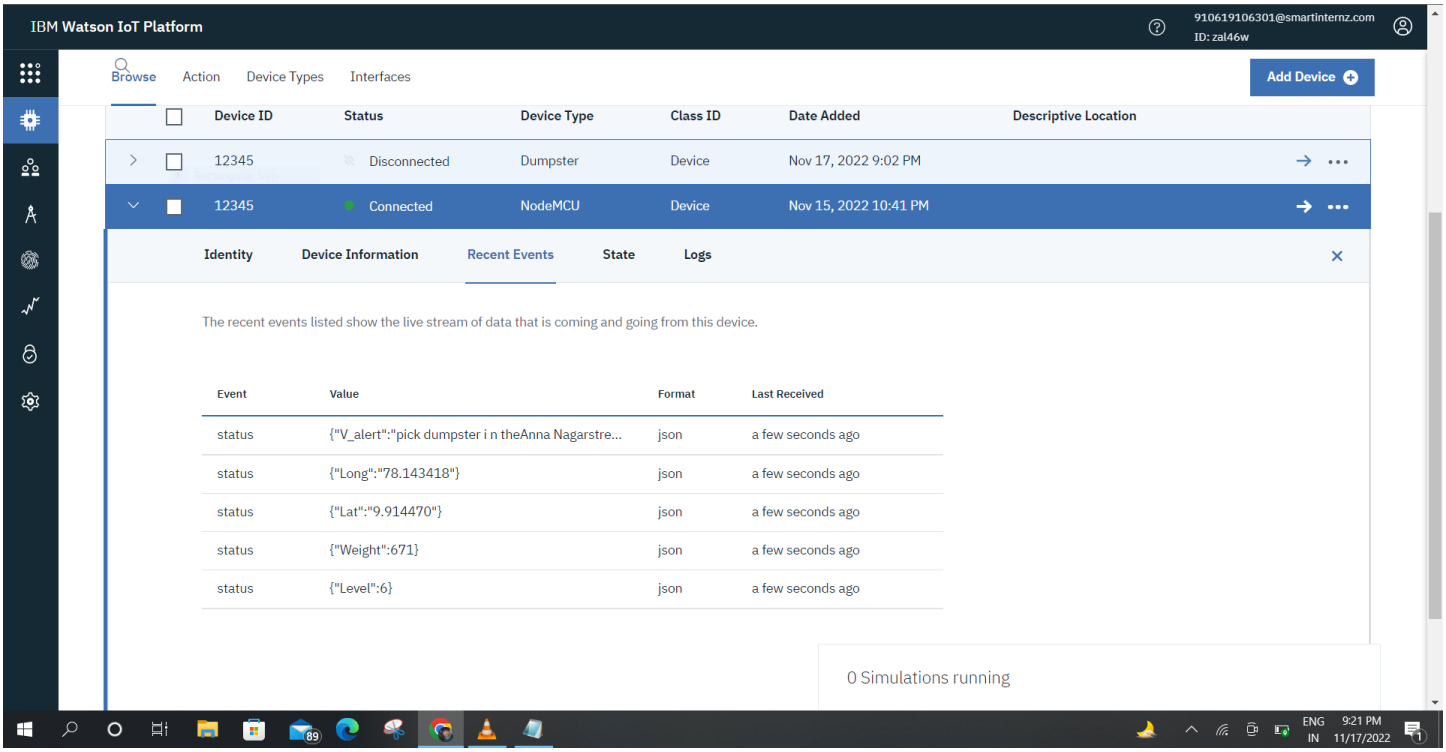

File Edit View Navigate Code Refactor Run Tools VCS Window Help pythonProject3 - main.py
pythonProject3 main.py
main.py iot.py swms.py
import wiotp.sdk.device
import time
from geopy.geocoders import Nominatim
import random
geoloc=Nominatim(user_agent="geoapiExercises")
lat="9.914470"
long="78.143418"
location=geoloc.reverse(lat+","+long)
addr=location.raw['address']
latitude = {'Lat': lat}
longitude = {'Long': long}
print(addr.get('suburb',''))
myConfig = {
"identity": {
"orgId": "zal46w",
"typeId": "NodeMCU",
"deviceId":"12345"},
"auth": {
"token": "1234567890"
}
}
def myCommandCallback(cmd):
print("Message received from IBM IoT Platform: %s" % cmd.data['command'])
m=cmd.data['command']
client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
client.connect()
while True
if level>50 and weight>500
Run: iot main
Published data Successfully: %s {'Lat': '9.914470'}
Published data Successfully: %s {'Long': '78.143418'}
2022-11-17 21:17:56,619 wiotp.sdk.device.client.DeviceClient INFO Connected successfully: d:zal46w:NodeMCU:12345
Published data Successfully: %s {'Level': 6}
Published data Successfully: %s {'Weight': 328}
Published data Successfully: %s {'Lat': '9.914470'}
Published data Successfully: %s {'Long': '78.143418'}
Published data Successfully: %s {'Level': 71}
Published data Successfully: %s {'Weight': 528}
Published data Successfully: %s {'Lat': '9.914470'}
Published data Successfully: %s {'Long': '78.143418'}
Published data Successfully: %s {'Level': 76}
Published data Successfully: %s {'Weight': 573}
Published data Successfully: %s {'Lat': '9.914470'}
Published data Successfully: %s {'Long': '78.143418'}
Published data Successfully: %s {'Level': 97}
Published data Successfully: %s {'Weight': 79}
Published data Successfully: %s {'Lat': '9.914470'}
Published data Successfully: %s {'Long': '78.143418'}
Version Control TODO Problems Terminal Python Packages Python Console
Event Log
30:29 CRLF UTF-8 1 space* Python 3.9
9:18 PM 11/17/2022


File Edit View Navigate Code Refactor Run Tools VCS Window Help pythonProject3 - main.py
pythonProject3 main.py
main.py iot.py swms.py
client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
client.connect()
while True:
level=random.randint(0,100)
weight= random.randint(0, 1000)
if level>50 and weight>500:
client.publishEvent(eventId="status", msgFormat="json", data={'V_alert':"pick dumpster i n the
time.sleep(2)
client.publishEvent(eventId="status", msgFormat="json", data={'V_alert': ""}, qos=0,
onPublish=None)
level_d={'Level':level}
weight_d = {'Weight': weight}
client.publishEvent(eventId="status", msgFormat="json", data=level_d, qos=0, onPublish=None)
client.publishEvent(eventId="status", msgFormat="json", data=weight_d, qos=0, onPublish=None)
client.publishEvent(eventId="status", msgFormat="json", data=latitude, qos=0, onPublish=None)
client.publishEvent(eventId="status", msgFormat="json", data=longitude, qos=0, onPublish=None)
print("Published data Successfully: %s", level_d)
print("Published data Successfully: %s", weight_d)
print("Published data Successfully: %s", latitude)
print("Published data Successfully: %s", longitude)
client.commandCallback = myCommandCallback
time.sleep(2)
client.disconnect()
while True if level>50 and weight>500
Run: iot main
'78.143418'}
Published data Successfully: %s {'Level': 50}
Published data Successfully: %s {'Weight': 246}
Published data Successfully: %s {'Lat': '9.914470'}
Published data Successfully: %s {'Long': '78.143418'}
Published data Successfully: %s {'Level': 69}
Published data Successfully: %s {'Weight': 873}
Published data Successfully: %s {'Lat': '9.914470'}
Published data Successfully: %s {'Long': '78.143418'}
Published data Successfully: %s {'Level': 84}
Published data Successfully: %s {'Weight': 637}
Published data Successfully: %s {'Lat': '9.914470'}
Published data Successfully: %s {'Long': '78.143418'}
Published data Successfully: %s {'Level': 75}
Published data Successfully: %s {'Weight': 145}
Published data Successfully: %s {'Lat': '9.914470'}
Published data Successfully: %s {'Long': '78.143418'}
Published data Successfully: %s {'Level': 57}
Published data Successfully: %s {'Weight': 5}
Published data Successfully: %s {'Lat': '9.914470'}
Published data Successfully: %s {'Long': '78.143418'}
Version Control TODO Problems Terminal Python Packages Python Console
Event Log
30:29 CRLF UTF-8 1 space* Python 3.9
9:19 PM 11/17/2022



Event	Value	Format	Last Received
status	{"Long":"78.143418"}	json	a few seconds ago
status	{"Lat":"9.914470"}	json	a few seconds ago
status	{"Weight":533}	json	a few seconds ago
status	{"Level":3}	json	a few seconds ago
status	{"V_alert":""}	json	a few seconds ago