

PROJECT DEVELOPMENT PHASE

SPRINT - 1

CREATE A DATABASE IN CLOUDANT DB AND DEVELOP THE PYTHON SCRIPT

DATE	29 OCTOBER 2022
TEAM ID	PNT2022TMID20466
PROJECT NAME	IOT BASED SAFETY GADGET FOR CHILD SAFETY MONITORING AND NOTIFICATION
TEAM LEADER	MONALISA M
TEAM MEMBERS	KIRUTHIKA D MADHUSRI J RAHAMATH SHIHANA S

USN 11: Launch the Cloudant DB and Create database to store the location data

The screenshot displays the IBM Cloud console interface. The top navigation bar includes the IBM Cloud logo, a search bar, and various service icons. The main content area shows the 'node-red-rfkey-2022--cloudant-1666966739396' resource, which is active. The 'Overview' tab is selected, displaying deployment details such as the CRN, Location (London), External endpoint, and Authentication methods. A 'Launch Dashboard' button is visible in the top right corner of the resource details. The bottom of the screen shows a Windows taskbar with several open applications, including a code editor and PDF files.

Service Clo x lot bar: Node- IBM W: Verify: Email: Devel: https:// API D: API D: IBM (135) (135) + -

b004d7a2-7180-47f1-a028-8828a305b068-bluemix.cloudant.com/dashboard.html

Databases Database name Create Database {} JSON

Your Databases

Name	Size	# of Docs	Partitioned	Actions
------	------	-----------	-------------	---------

Showing 1-0 of 0 databases. Databases per page 20 1

code 4.txt BURNDOWN CHA...pdf ROAD MAP SPRIN...pdf SPRINT 2 - CHILD...pdf Sprint - 1 - CHIL...docx Show all X

Type here to search 25°C ENG 08:51 09-11-2022

USN 12: Install the python software

File Home Share View Application Tools Manage Downloads

This PC > Downloads

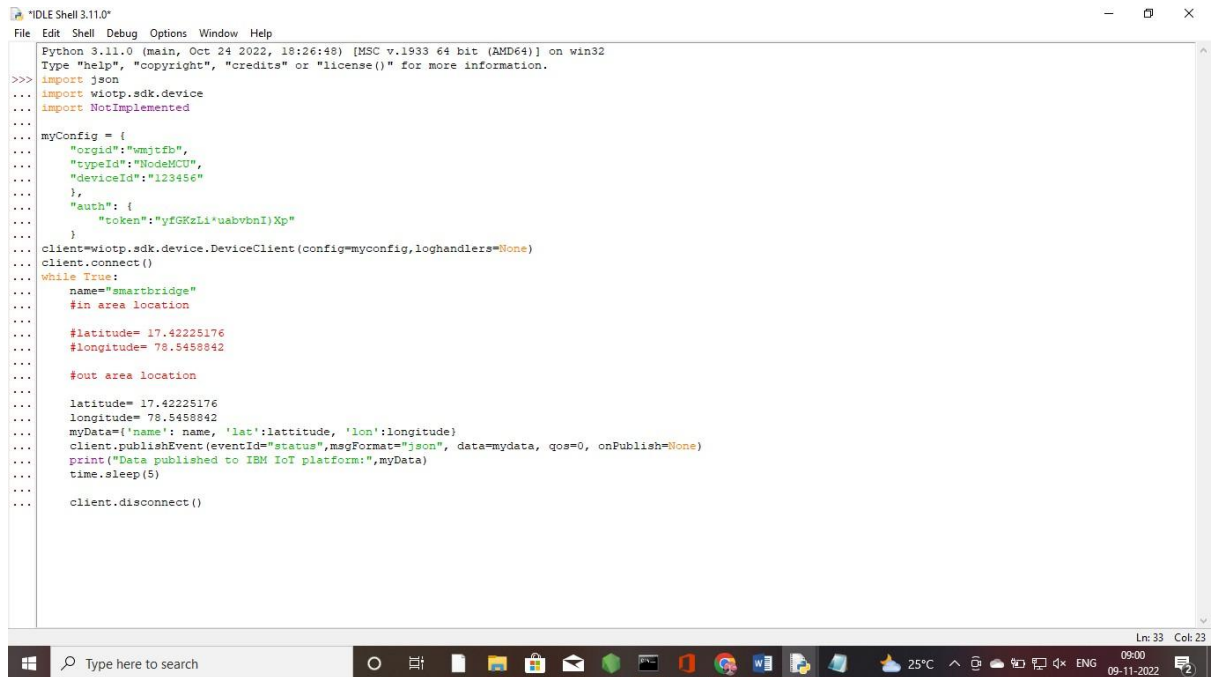
Search Downloads

Name	Date modified	Type	Size
> Yesterday (6)			
> Earlier this week (4)			
> Last week (3)			
Project Planning IOT child safety (EDITED)	06-11-2022 20:27	Microsoft Edge P...	230 KB
python-3.11.0-amd64	05-11-2022 06:09	Application	24,568 KB
node-v18.12.1-x64	05-11-2022 05:35	Windows Installer ...	29,964 KB

13 items 1 item selected 23.9 MB

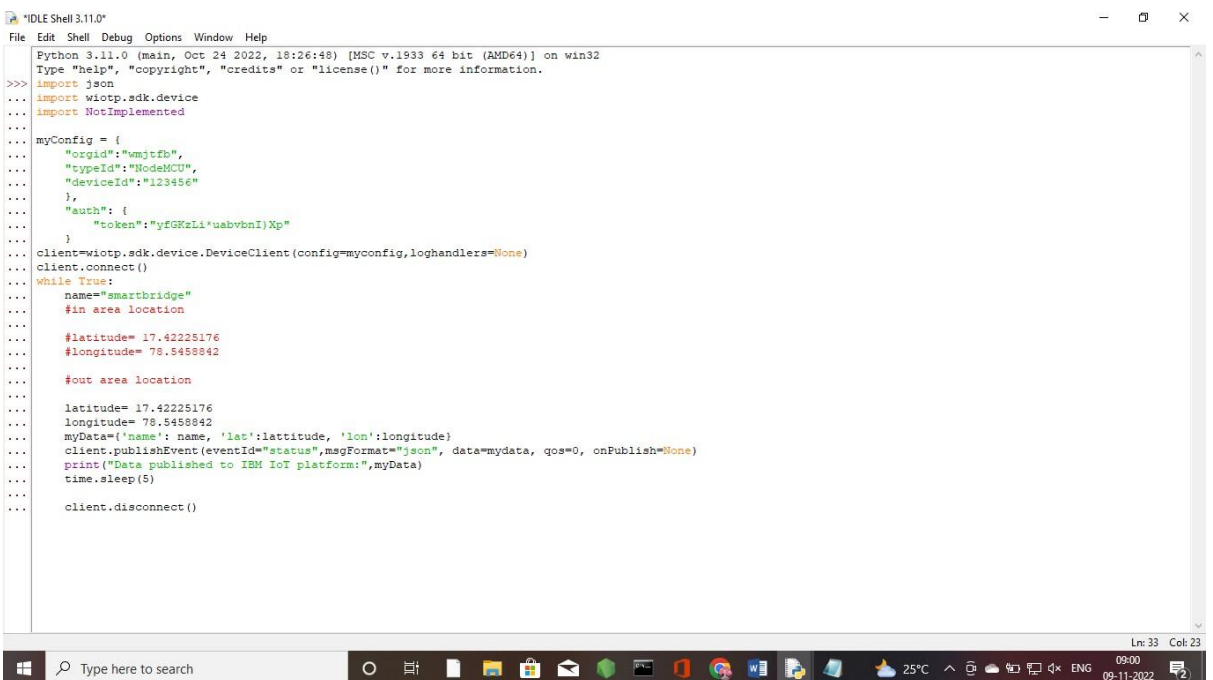
Type here to search 25°C ENG 08:58 09-11-2022

USN 13: Develop the python scripts to publish details to IBM IoT Platform



```
Python 3.11.0 (main, Oct 24 2022, 18:26:48) [MSC v.1933 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>> import json
... import wiotp.sdk.device
... import NotImplemented
...
... myConfig = {
...     "orgid": "wmjtfb",
...     "typeId": "NodeMCU",
...     "deviceId": "123456"
... },
...     "auth": {
...         "token": "yFGKzLi'uaabvbnI)Xp"
...     }
... }
... client=wiotp.sdk.device.DeviceClient(config=myconfig, loghandlers=None)
... client.connect()
... while True:
...     name="smartbridge"
...     #in area location
...
...     #latitude= 17.42225176
...     #longitude= 78.5458842
...
...     #out area location
...
...     latitude= 17.42225176
...     longitude= 78.5458842
...     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()
```

USN 14: Integrate the device id, authentication token in python script

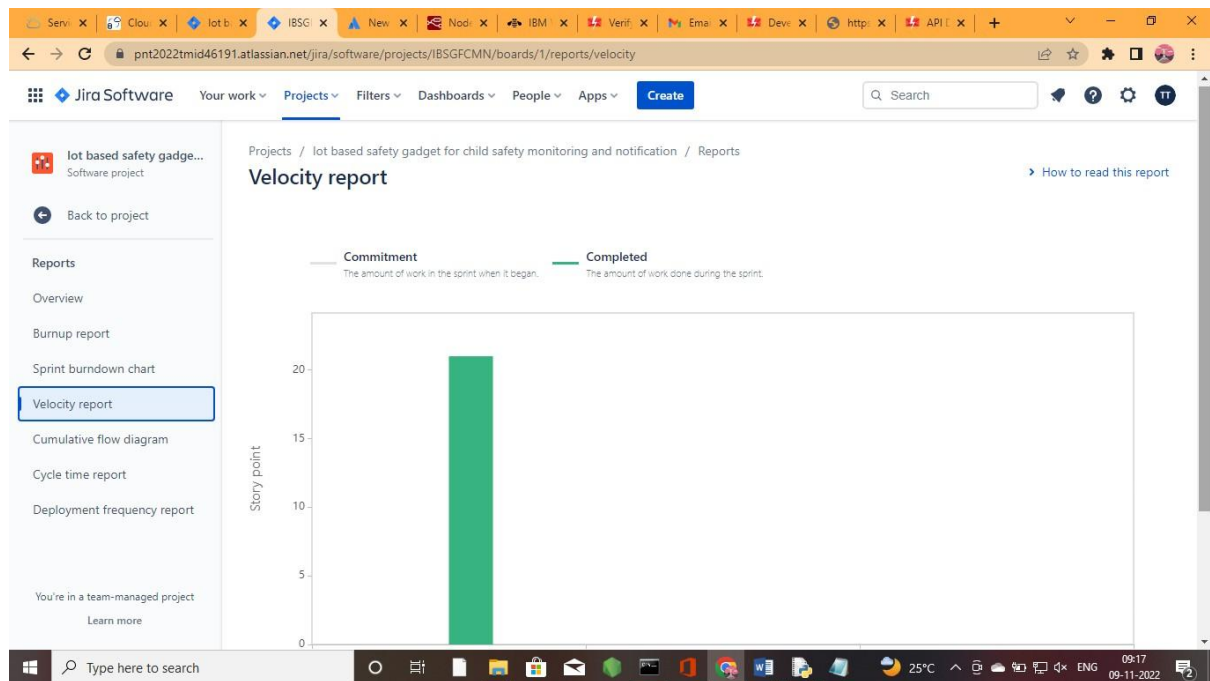


```
Python 3.11.0 (main, Oct 24 2022, 18:26:48) [MSC v.1933 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>> import json
... import wiotp.sdk.device
... import NotImplemented
...
... myConfig = {
...     "orgid": "wmjtfb",
...     "typeId": "NodeMCU",
...     "deviceId": "123456"
... },
...     "auth": {
...         "token": "yFGKzLi'uaabvbnI)Xp"
...     }
... }
... client=wiotp.sdk.device.DeviceClient(config=myconfig, loghandlers=None)
... client.connect()
... while True:
...     name="smartbridge"
...     #in area location
...
...     #latitude= 17.42225176
...     #longitude= 78.5458842
...
...     #out area location
...
...     latitude= 17.42225176
...     longitude= 78.5458842
...     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()
```

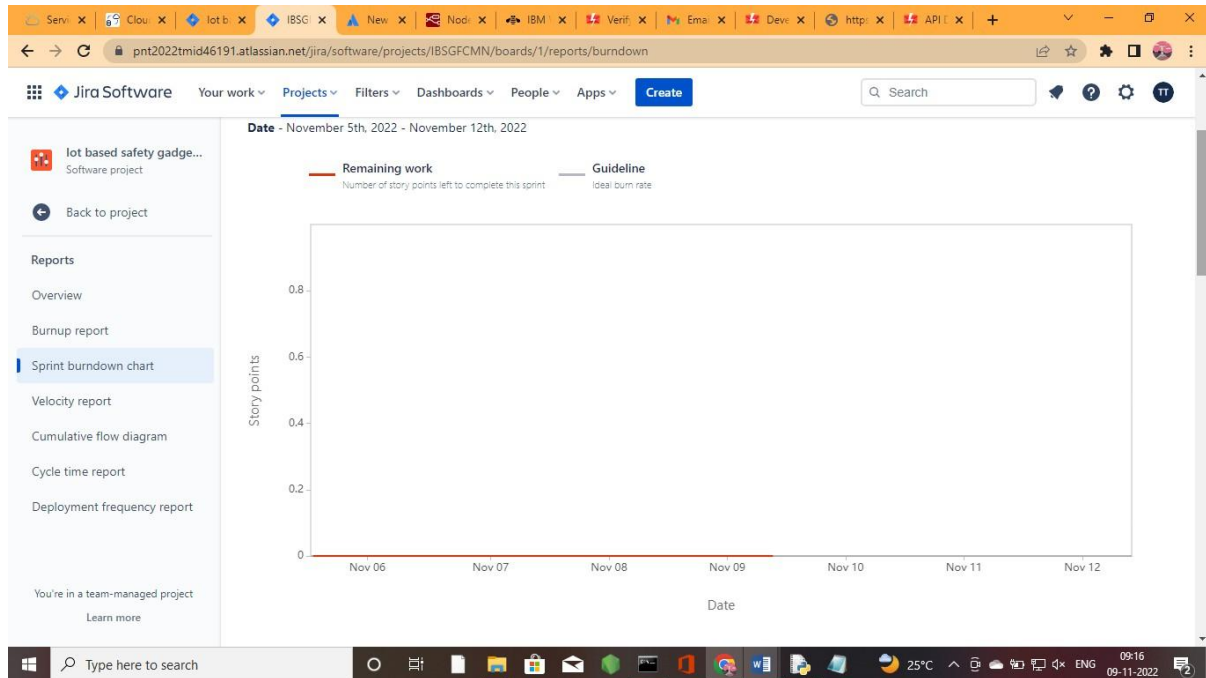
USN 15: Develop the python code for publishing the location (latitude & longitude) to IBM IoT Platform

```
"IDLE Shell 3.11.0"
File Edit Shell Debug Options Window Help
Python 3.11.0 (main, Oct 24 2022, 18:26:48) [MSC v.1933 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>> import json
... import wiotp.sdk.device
... import NotImplemented
...
... myConfig = {
...     "orgid": "vmjtfb",
...     "typeId": "NodeMCU",
...     "deviceId": "123456"
... },
...     "auth": {
...         "token": "yfGKzLi'uaBvbnI)Xp"
...     }
... }
... client=wiotp.sdk.device.DeviceClient(config=myconfig, loghandlers=None)
... client.connect()
... while True:
...     name="Smartbridge"
...     #in area location
...     #latitude= 17.42225176
...     #longitude= 78.5458842
...     #out area location
...     latitude= 17.42225176
...     longitude= 78.5458842
...     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()
```

VELOCITY GRAPH:



BURNDOWN CHART:



ROAD MAP:

