

PROJECT DEVELOPMENT PHASE

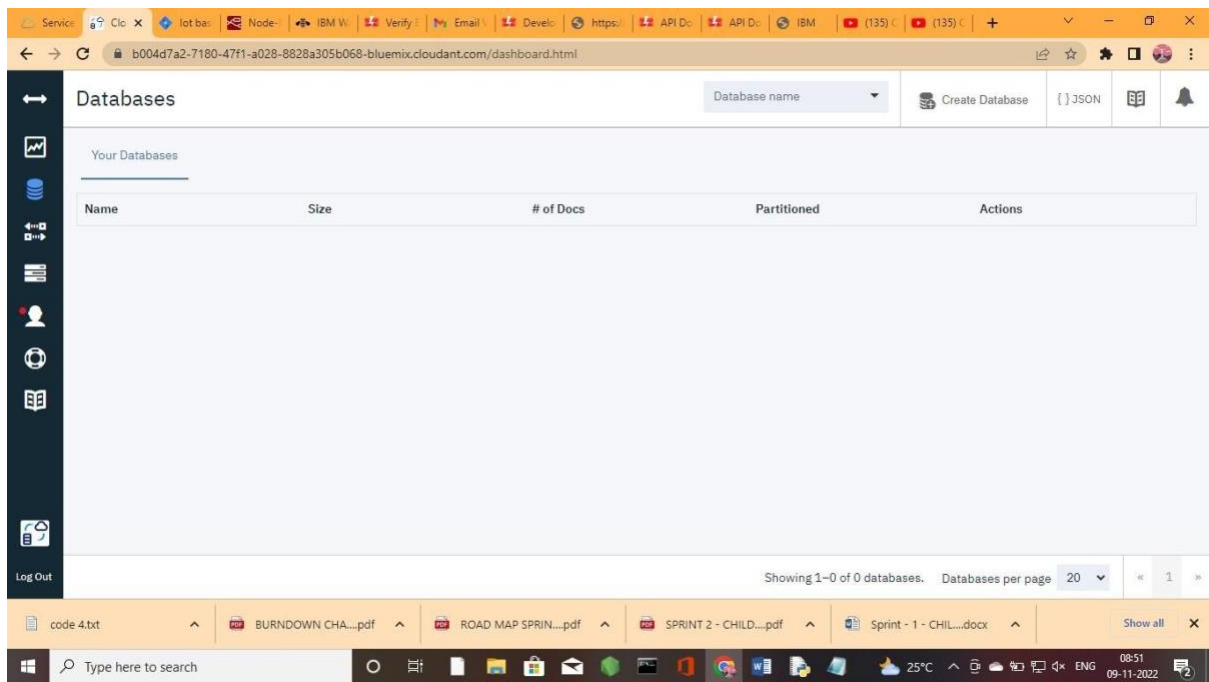
SPRINT - 3

CREATE A DATABASE IN CLOUDANT DB AND DEVELOP THE PYTHON SCRIPT

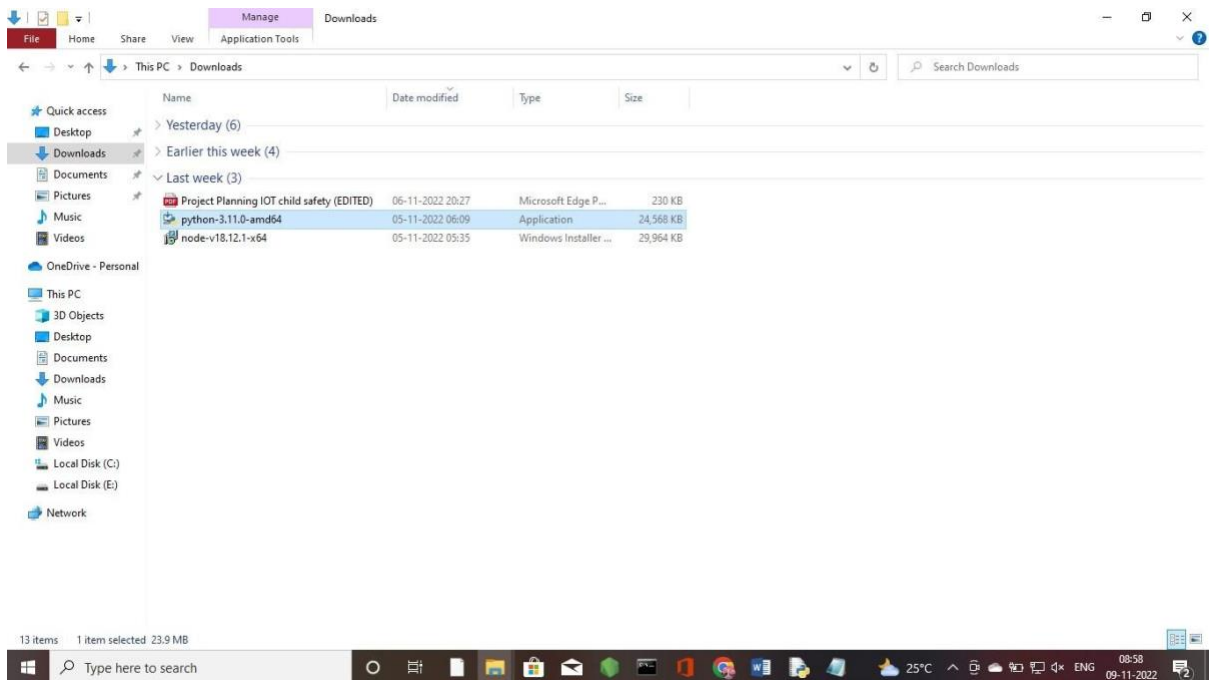
TEAM ID	PNT2022TMID26623
PROJECT NAME	IOT BASED SAFETY GADGET FOR CHILD SAFETY MONITORING AND NOTIFICATION

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

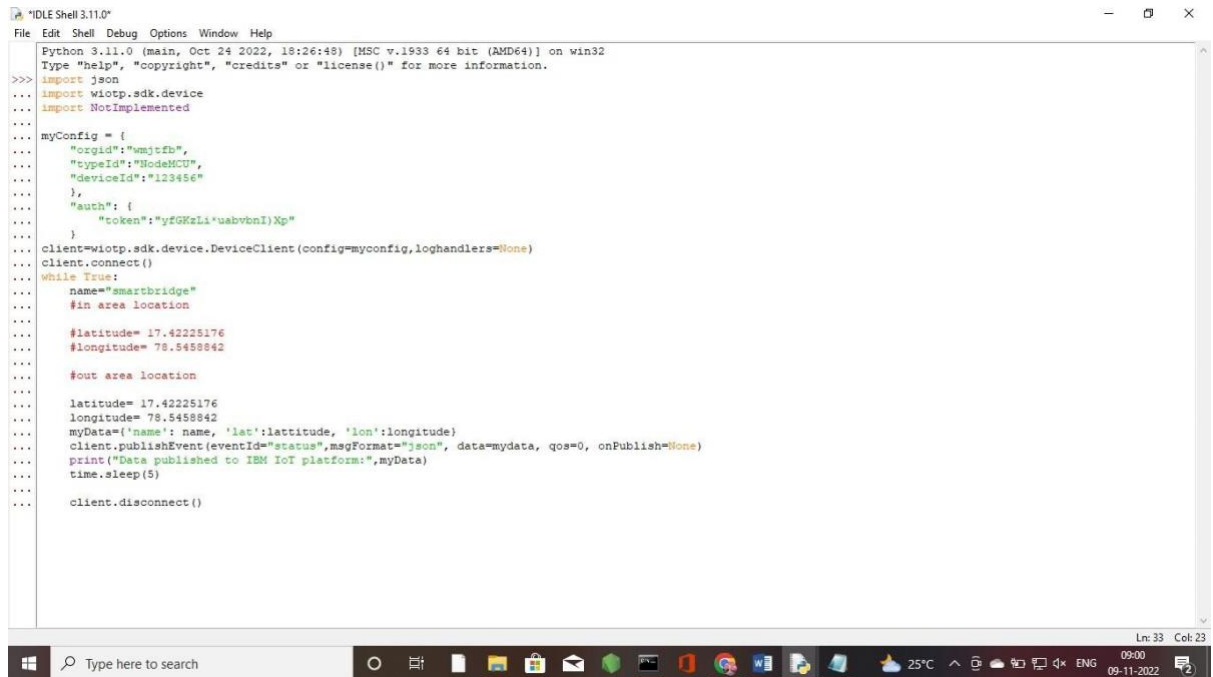
The screenshot displays the IBM Cloud console interface. The top navigation bar includes the IBM Cloud logo, a search bar, and links for Catalog, Manage, and user profile. The main content area shows the 'Resource list' for a specific instance named 'node-red-rfkey-2022--cloudant-1666966739396'. The instance is in an 'Active' state. The left sidebar contains a 'Manage' section with links for Service credentials, Plan, and Connections. The main panel shows 'Deployment details' for the instance, including the CRN, Location (London), External endpoint, External endpoint (preferred), and Authentication methods (IBM Cloud IAM and Cloudant credentials). A 'Launch Dashboard' button is visible in the top right corner of the deployment details section. The bottom of the screenshot shows a Windows taskbar with various application icons and a system tray displaying the date and time.



USN 12: Install the python software

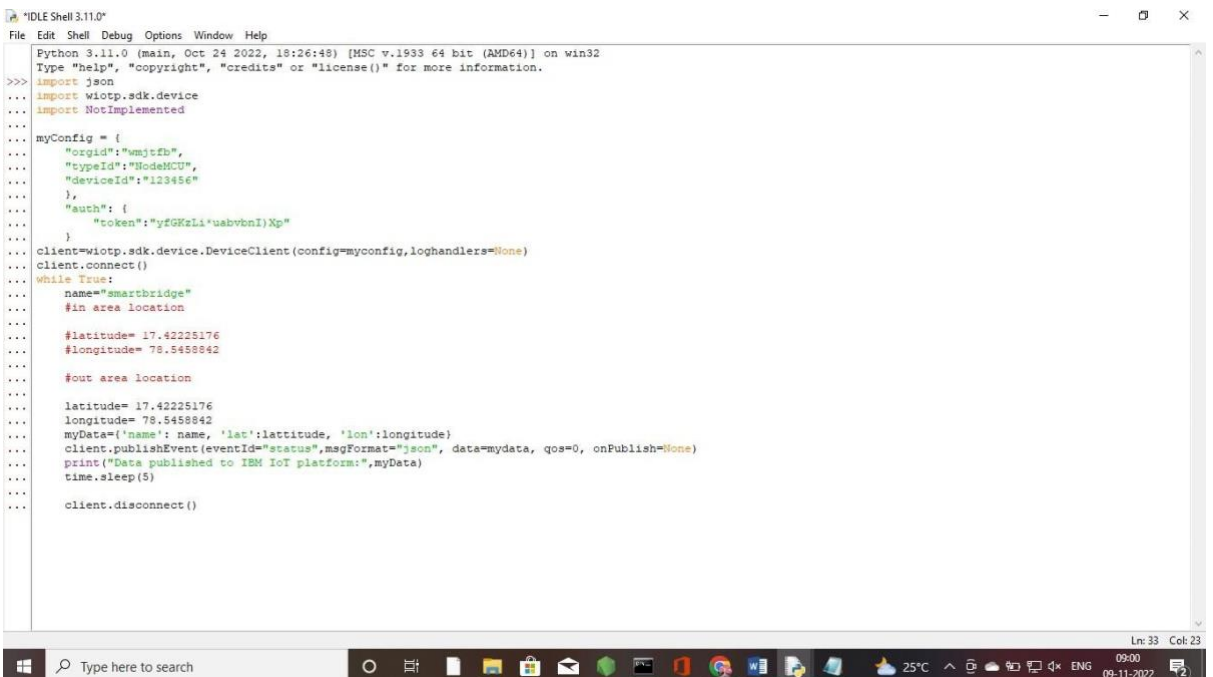


USN 13: Develop the python scripts to publish details to IBM IoT Platform



```
"IDLE Shell 3.11.0"
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": "wmjctfb",
...     "typeId": "NodeMCU",
...     "deviceId": "123456"
... },
...     "auth": {
...         "token": "yfGKzLi'usbvbnI)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



```
"IDLE Shell 3.11.0"
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": "wmjctfb",
...     "typeId": "NodeMCU",
...     "deviceId": "123456"
... },
...     "auth": {
...         "token": "yfGKzLi'usbvbnI)Xp"
...     }
... }
... client=wiotp.sdk.device.DeviceClient(config=myconfig, loghandlers=None)
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... while True:
...     name="smartbridge"
...     #in area location
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...     #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

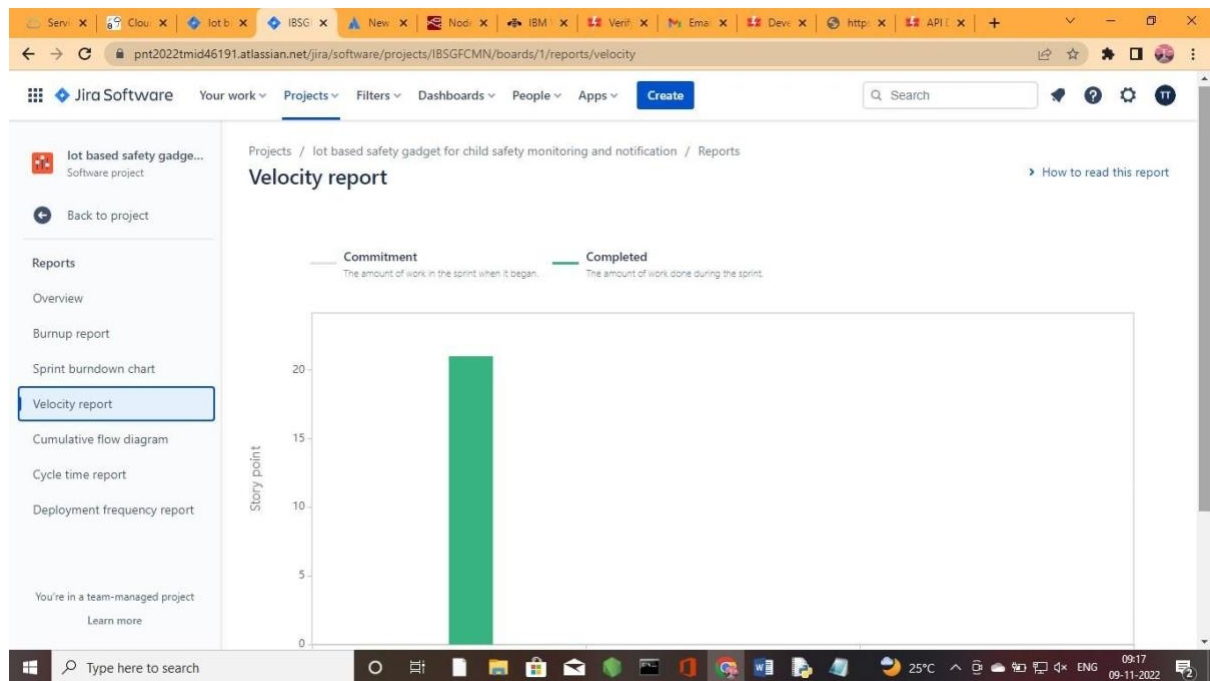
```
"IDLE Shell 3.11.0"
File Edit Shell Debug Options Window Help
Python 3.11.0 (main, Oct 24 2022, 18:26:48) [MSC v.1933 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>> import json
... import wiotp.sdk.device
... import NotImplemented
...
... myConfig = {
...     "orgid": "umjtfb",
...     "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()
```

Ln: 33 Col: 23

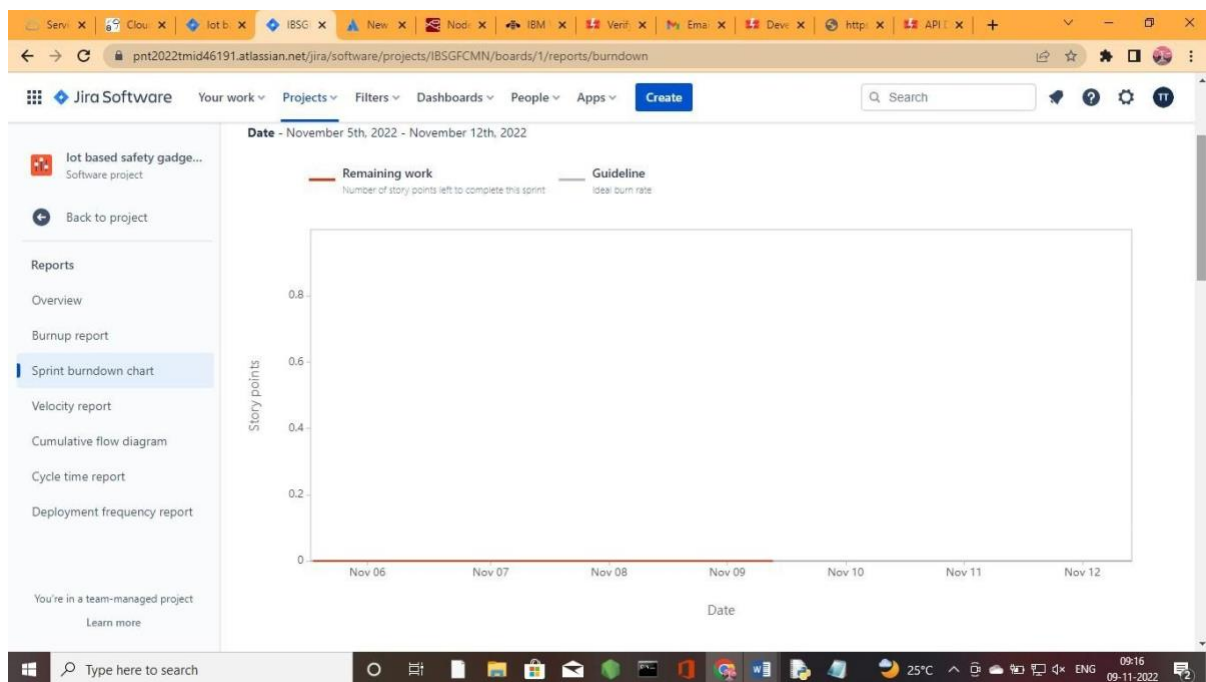
Type here to search

25°C 09:00 09-11-2022

VELOCITY GRAPH:



BURNDOWN CHART:



ROAD MAP:

