

PROJECT PLANNING PHASE -- SPRINT - 3

Date	9 NOVEMBER 2022
Team ID	PNT2022TMID46191
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

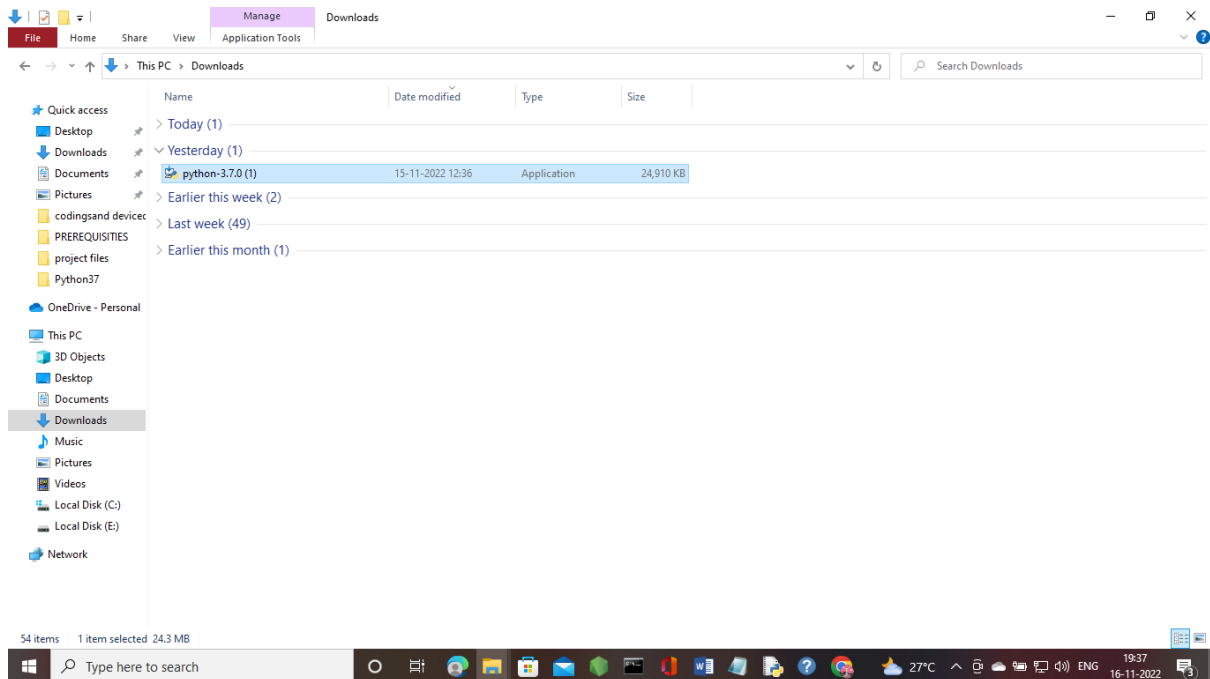
The screenshot shows the IBM Cloud console interface. The top navigation bar includes the IBM Cloud logo, a search bar, and links to Catalog, Manage, and the user profile 'Theo Thrinisha Mary's ...'. The main content area displays the 'Resource list' for the instance 'node-red-rfkey-2022--cloudant-1666966739396', which is in an 'Active' state. The 'Overview' tab is selected, showing deployment details:

- CRN:** crn:v1:bluemix:public:cloudantnosqldb:eu-gb:a/81704e207bbb454dbb467f57228f4cb8:f536beaf-861e-4a97-b1ac-d0d58df9e94e::
- Location:** London
- External endpoint:** <https://b004d7a2-7180-47f1-a028-8828a305b068-bluemix.cloudant.com>
- External endpoint (preferred):** <https://b004d7a2-7180-47f1-a028-8828a305b068-bluemix.cloudantnosqldb.appdomain.cloud>
- Authentication methods:** [IBM Cloud IAM](#) and [Cloudant credentials](#). A button 'Migrate to IAM Only' is also present.

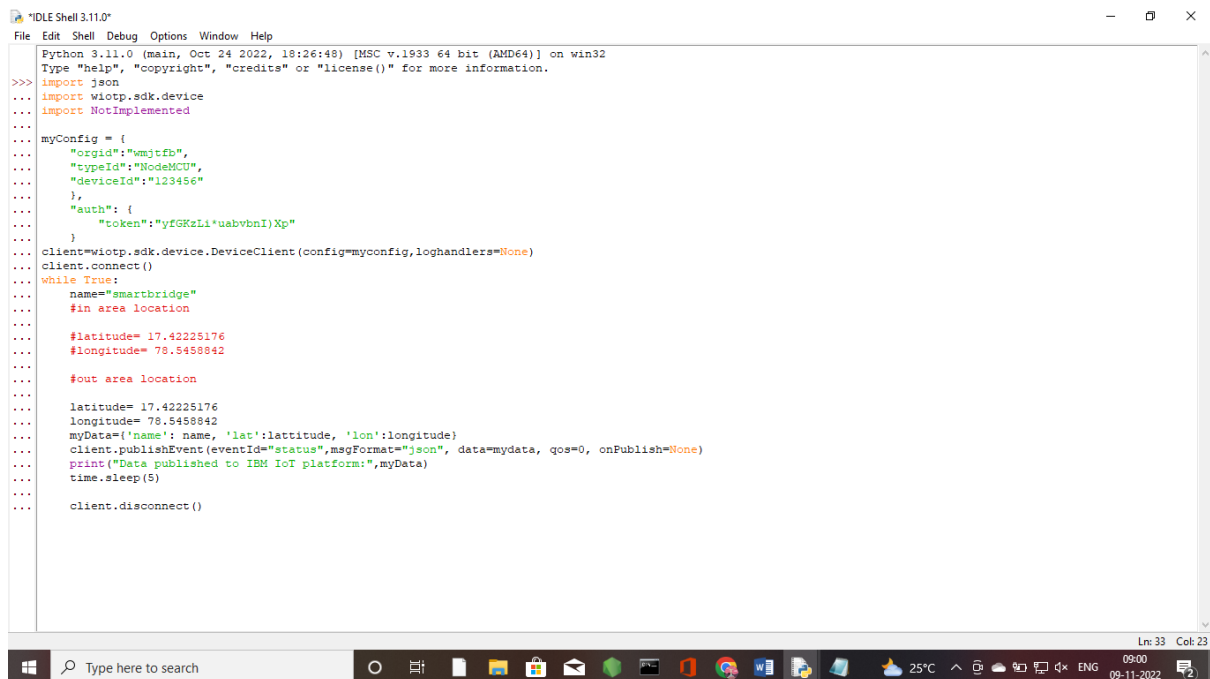
The left sidebar shows 'Manage' options: Service credentials, Plan, and Connections. The bottom of the screen shows a Windows taskbar with various application icons and a system clock indicating 08:49 on 09-11-2022.

The screenshot shows the Cloudant dashboard interface. The top navigation bar includes the Cloudant logo, a search bar, and links to Create Database, JSON, and a notification bell. The main content area displays the 'Databases' section with a sub-header 'Your Databases'. Below this is a table with the following columns: Name, Size, # of Docs, Partitioned, and Actions. The table is currently empty. The bottom of the screen shows a Windows taskbar with various application icons and a system clock indicating 08:51 on 09-11-2022.

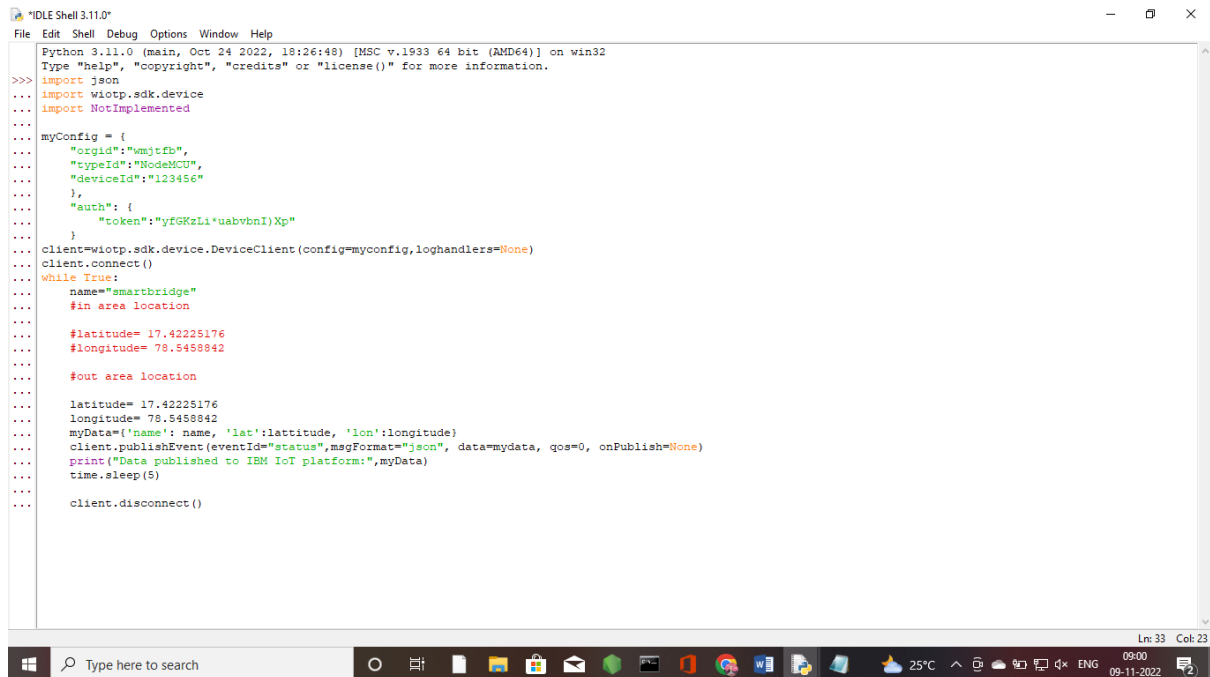
USN 12: Install the python software



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

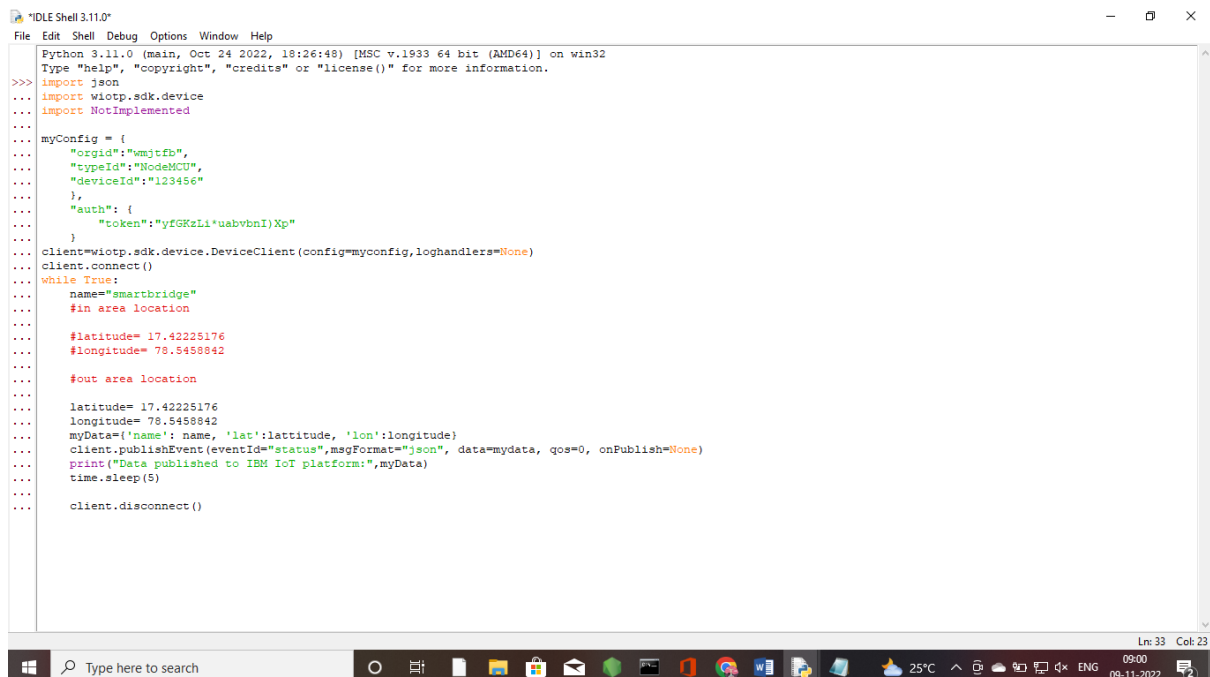


USN 14: Integrate the device id, authentication token in python script



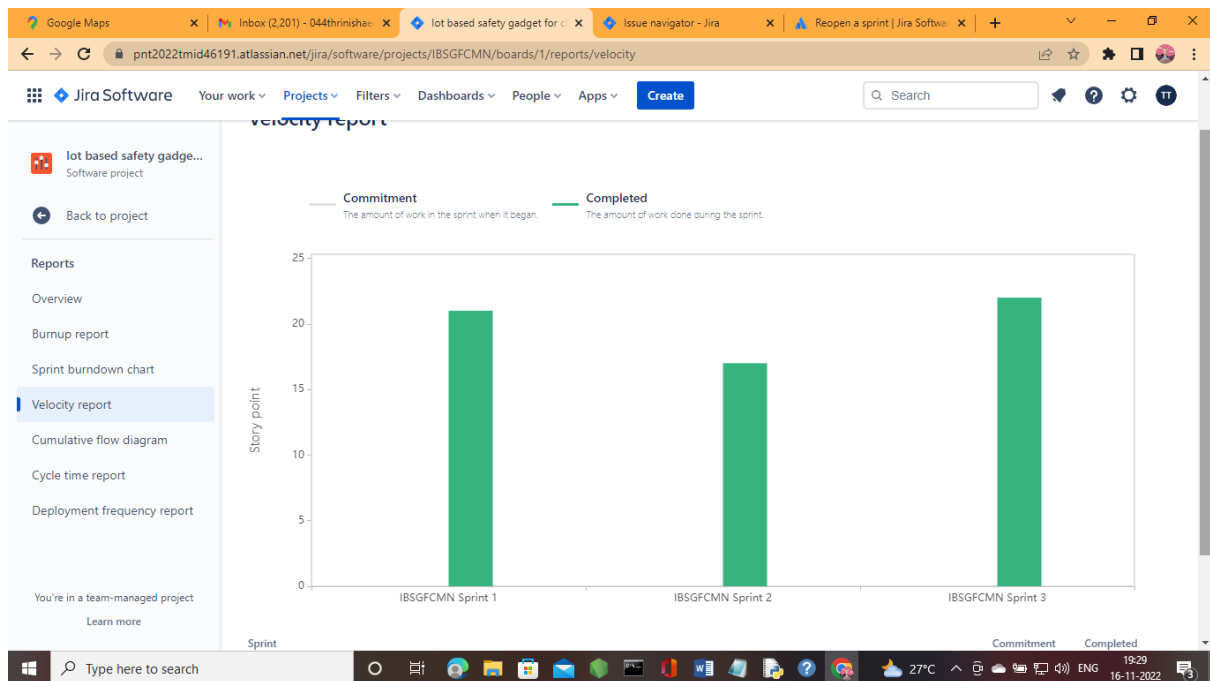
```
Python 3.11.0 (main, Oct 24 2022, 18:26:48) [MSC v.1933 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>> import json
... import wiotp.sdk.device
... import NotImplemented
...
... myConfig = {
...     "orgid": "wmjctfb",
...     "typeId": "NodeMCU",
...     "deviceId": "123456"
... },
...     "auth": {
...         "token": "yFGKzLi'uaBybnI'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

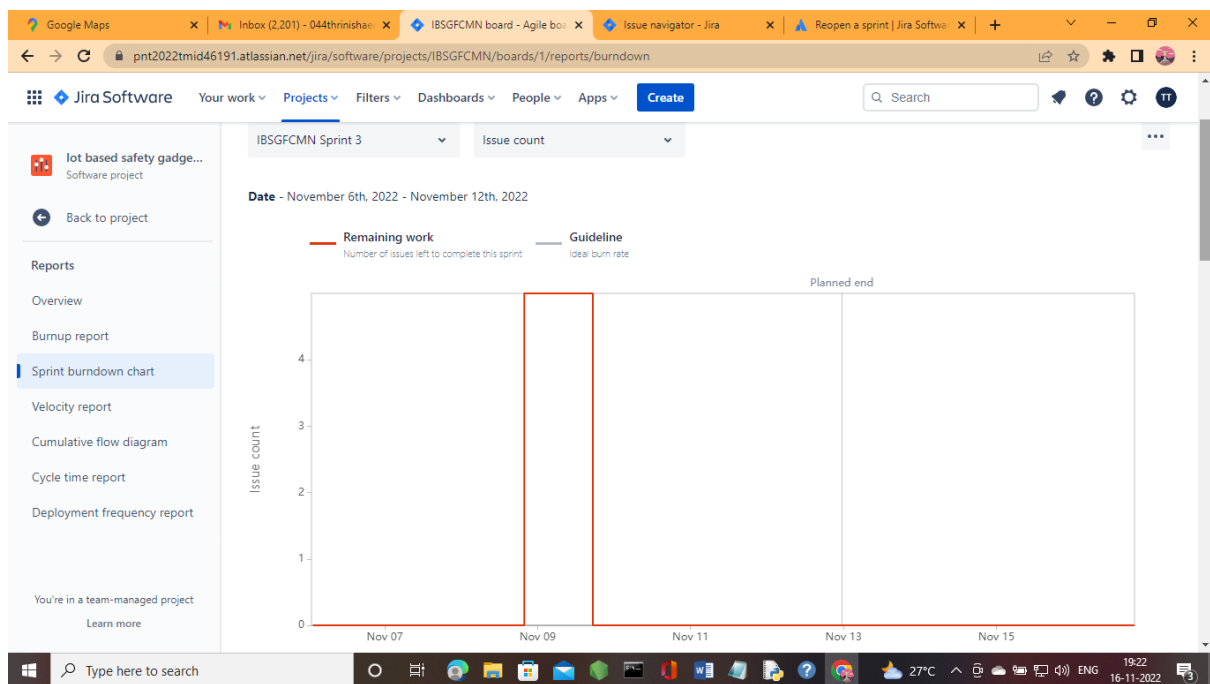


```
Python 3.11.0 (main, Oct 24 2022, 18:26:48) [MSC v.1933 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>> import json
... import wiotp.sdk.device
... import NotImplemented
...
... myConfig = {
...     "orgid": "wmjctfb",
...     "typeId": "NodeMCU",
...     "deviceId": "123456"
... },
...     "auth": {
...         "token": "yFGKzLi'uaBybnI'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:

