Train The Model On IBM

Train The Model on IBM Watson

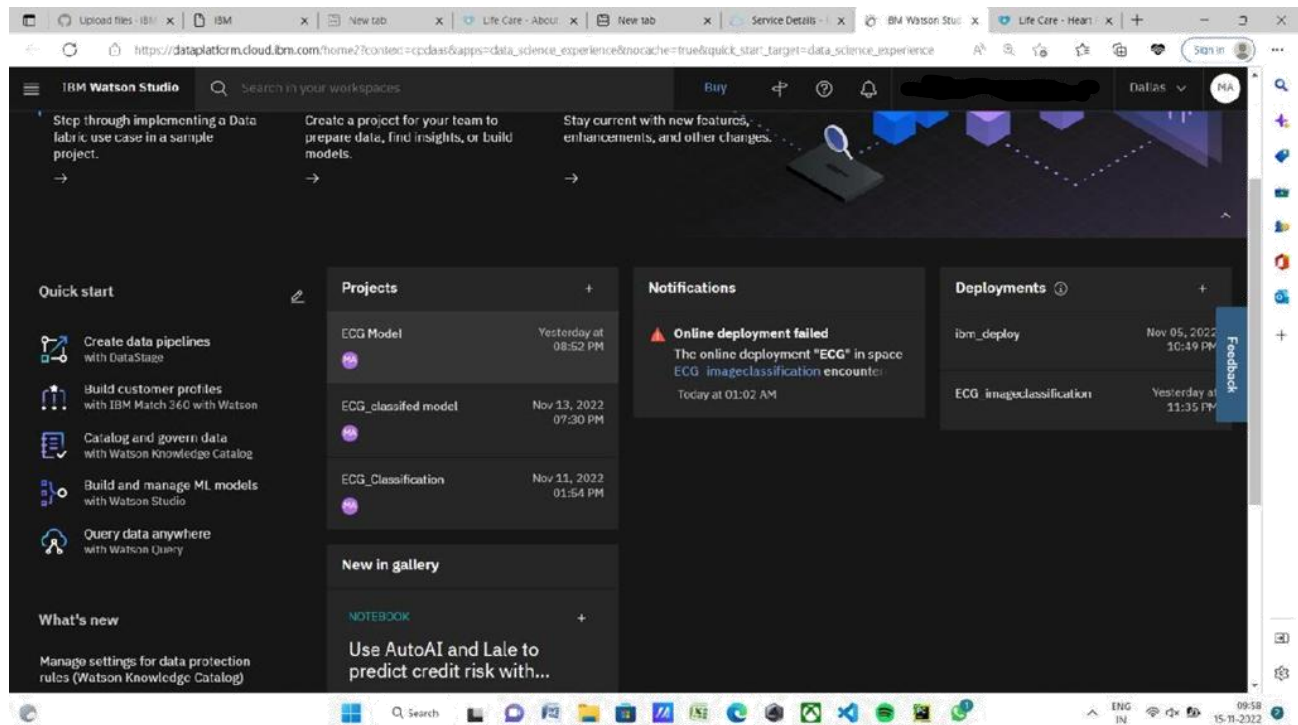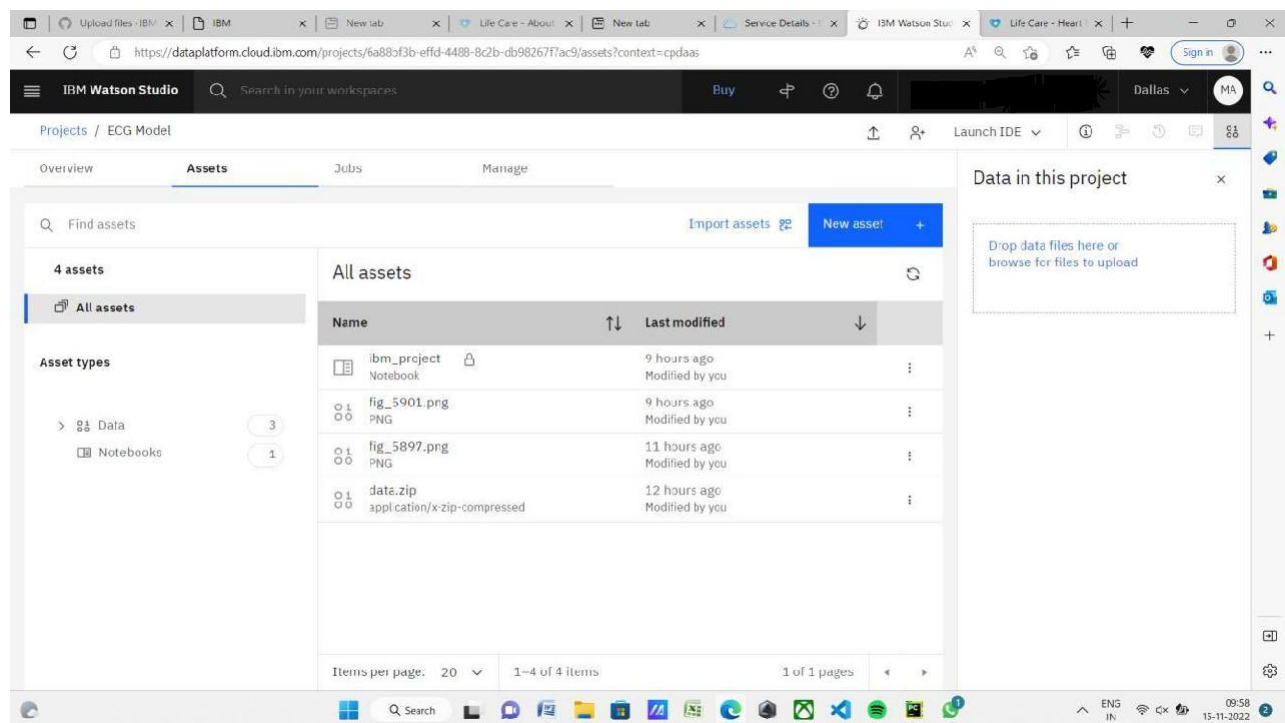| Date	18 Nov 2022
TeamID	PNT2022TMID09656
ProjectName	Classification of Arrhythmia by Using Deep Learning with 2-D ECG Spectral Image Representation

TASK:

Train The Model on IBM Watson:
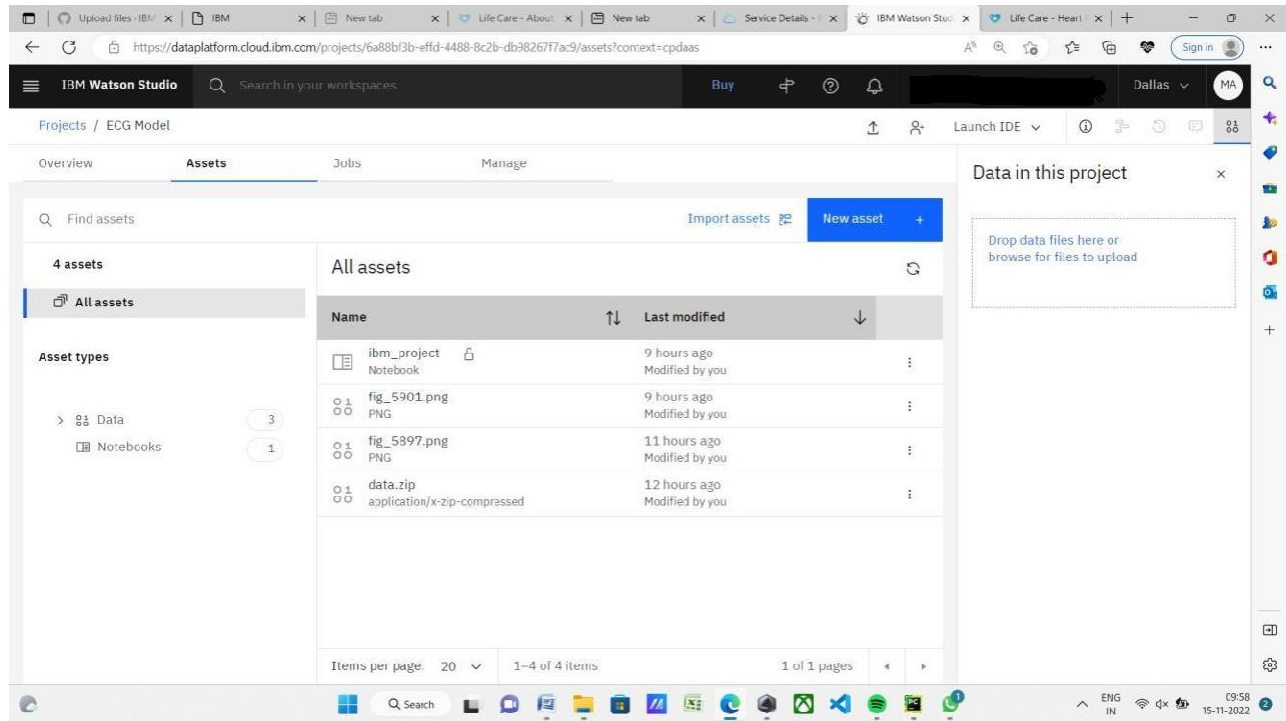
GO ON WATSON SERVICES(SCREEN SHOT):
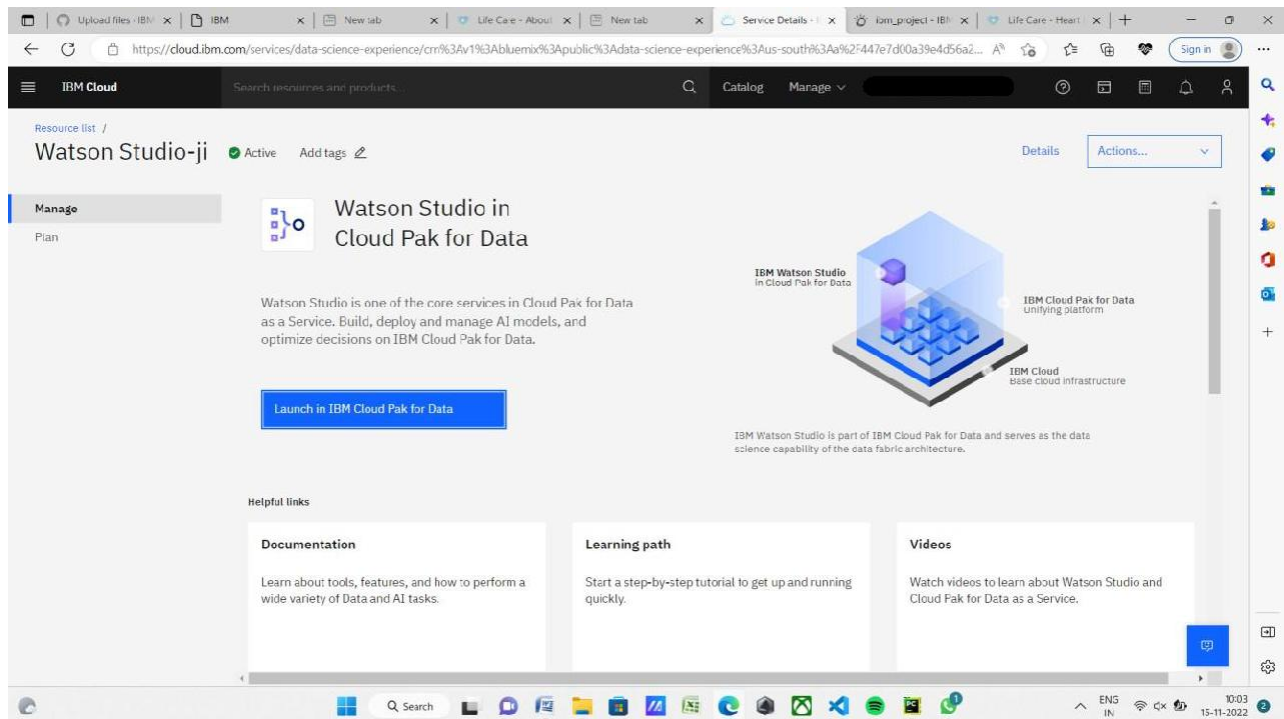
GO ON NEW PROJECT (SCREEN SHOT):

GO ON ASSEST(SCREEN SHOT):

GO ON IBM_PROJECT(SCREEN SHOT):

JUPYTER NOTEBOOK(SCREEN SHOT):
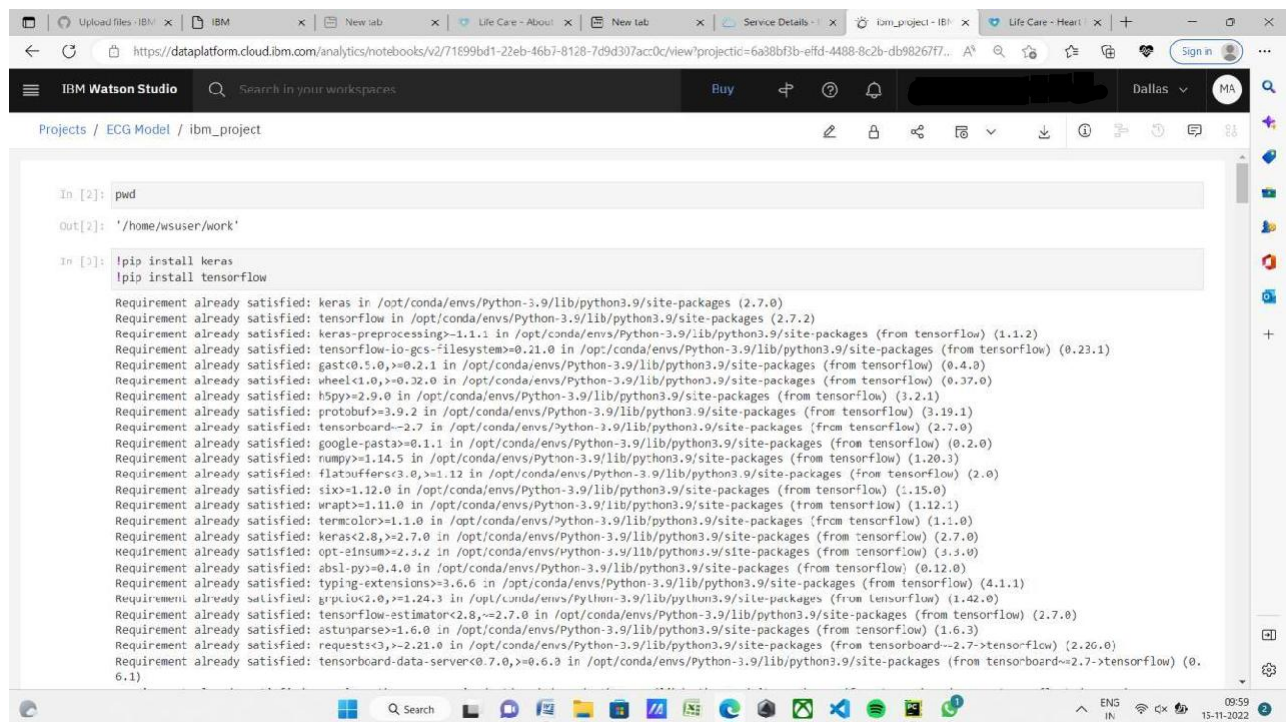
```python
In [8]:  train_datagen = ImageDataGenerator(rescale = 1./255,shear_range = 0.2,zoom_range = 0.2,horizontal_flip = True)
         test_datagen = ImageDataGenerator(rescale = 1./255)
```

```python
In [25]: import os, types
         import pandas as pd
         from botocore.client import Config
         import ibm_boto3

         def __iter__(self): return 0

         # @hidden_cell
         # The following code accesses a file in your IBM Cloud Object Storage. It includes your credentials.
         # You might want to remove those credentials before you share the notebook.
         cos_client = ibm_boto3.client(service_name='s3',
             ibm_api_key_id='8VA5EnF5GMnF-ngEHtRQK2IDilQdI0ufj0r54D5pCCZA',
             ibm_auth_endpoint="https://iam.cloud.ibm.com/oidc/token",
             config=Config(signature_version='oauth'),
             endpoint_url='https://s3.private.us.cloud-object-storage.appdomain.cloud')

         bucket = 'ecgmodel-dorotdelete-pr-nplmuzalbo80rd'
         object_key = 'data.zip'

         streaming_body_1 = cos_client.get_object(Bucket=bucket, Key=object_key)['Body']

         # Your data file was loaded into a botocore.response.StreamingBody object.
         # Please read the documentation of ibm_boto3 and pandas to learn more about the possibilities to load the data.
         # ibm_boto3 documentation: https://ibm.github.io/ibm-cos-sdk-python/
         # pandas documentation: http://pandas.pydata.org/
```

```python
In [26]: from io import BytesIO
         import zipfile
         unzip=zipfile.ZipFile(BytesIO(streaming_body_1.read()),'r')
         file_paths=unzip.namelist()
```

```
Requirement already satisfied: numpy>=1.17.3 in /opt/conda/envs/Python-3.9/lib/python3.9/site-packages (from pandas->watson-machine-learning-client) (1.20.3)
Note: you may need to restart the kernel to use updated packages.
```

```python
In [104.. # Replace the credentials that you got from watson machine learning service
          from ibm_watson_machine_learning import APIClient
          wml_credentials = {
                          "url": "https://us-south.ml.cloud.ibm.com",
                          "apikey":"T2vtAoHG5tyBqLPq-gE11hROKW307Do0N1m5SfSH4dD9M"
                          }
          client = APIClient(wml_credentials)
```

```python
In [105.. client = APIClient(wml_credentials)
```

```python
In [106.. client.spaces.list()
```

```
Note: 'limit' is not provided. Only first 50 records will be displayed if the number of records exceed 50
------------------------------------  ----------------------  ------------------------
ID                                    NAME                    CREATED
a5359809-7795-48ec-aa02-5bdd98bc7c2b  ECG_imageclassification 2022-11-14T17:43:44.414Z
aadd9634-6c96-4253-b644-51233843b797  ibm_deploy              2022-11-05T17:19:15.321Z
------------------------------------  ----------------------  ------------------------
```

```python
In [107.. def guid_from_space_name(client, space_name):
              space = client.spaces.get_details()
              #print(space)
              return(next(item for item in space['resources'] if item['entity']['name'] == space_name)['metadata']['id'])
```

```python
In [108.. space_uid = guid_from_space_name(client, 'ECG_imageclassification')
          print("Space UID = "+ space_uid)

          Space UID = a5359809-7795-48ec-aa02-5bdd98bc7c2b
```

```python
In [109.. client.set.default_space(space_uid)
```

```
Out[109]: 'SUCCESS'
```