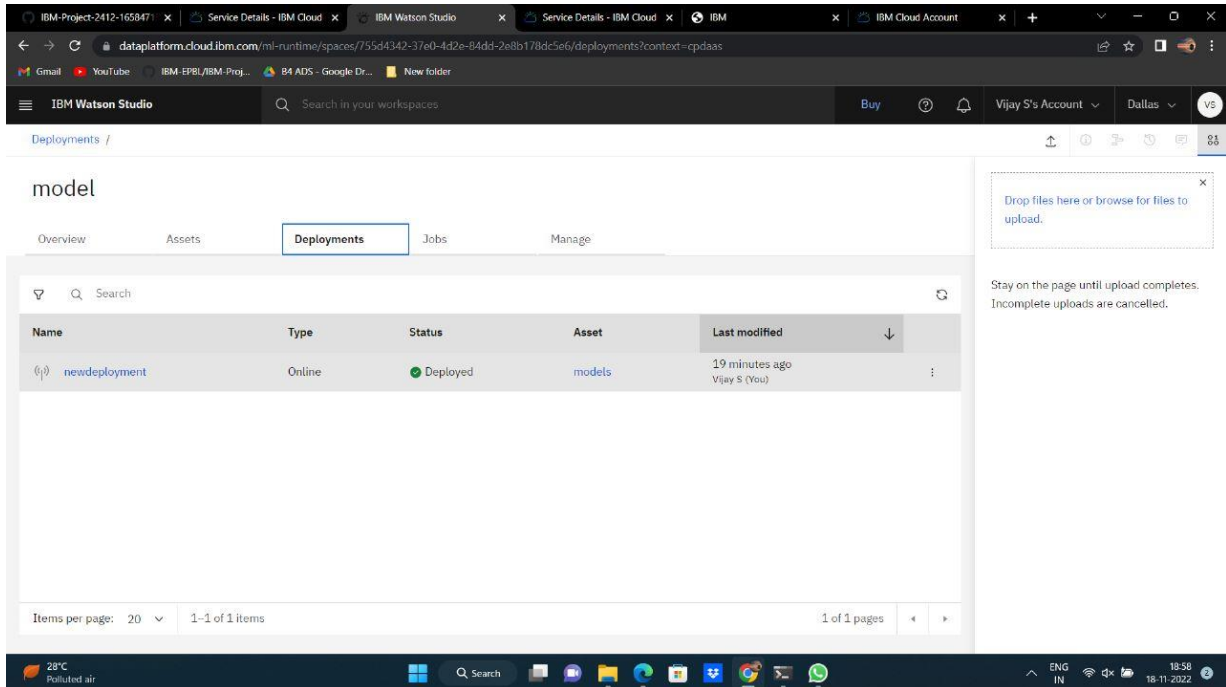


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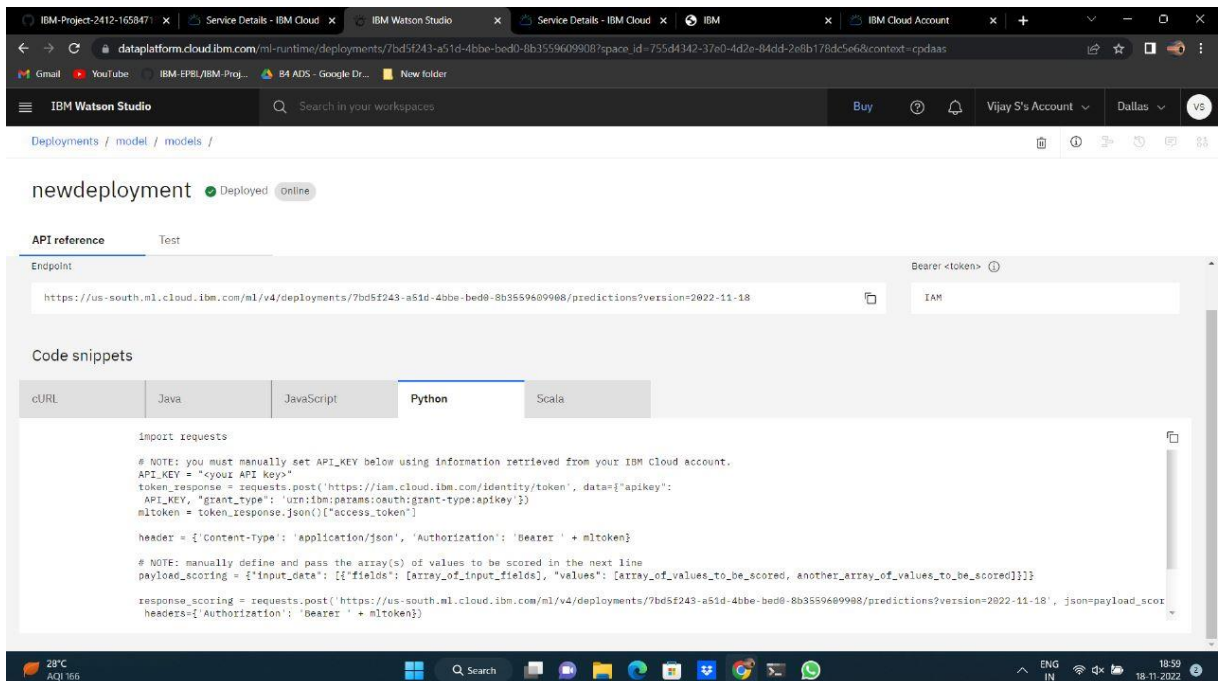
TEAM ID:PNT2022TMID01198

Training the machine learning model in IBM



The screenshot shows the IBM Watson Studio interface. The browser address bar displays the URL: `dataplatfrom.cloud.ibm.com/ml-runtime/spaces/755d4342-37e0-4d2e-84dd-2e8b178dc5e6/deployments?context=cpdaas`. The page title is "Deployments /". The main content area shows a table with one deployment named "newdeployment" in an "Online" state, with a status of "Deployed" and a last modified time of "19 minutes ago". The table has columns for Name, Type, Status, Asset, and Last modified. A sidebar on the right contains a file upload instruction: "Drop files here or browse for files to upload." and a note: "Stay on the page until upload completes. Incomplete uploads are cancelled."

Name	Type	Status	Asset	Last modified
newdeployment	Online	Deployed	models	19 minutes ago Vijay S (You)



The screenshot shows the IBM Watson Studio API reference page for the "newdeployment" endpoint. The page title is "newdeployment" with a "Deployed" status and an "Online" toggle. The "API reference" tab is selected, showing the endpoint URL: `https://us-south.ml.cloud.ibm.com/ml/v4/deployments/7bd5f243-a51d-4bbe-bed0-8b3559609908/predictions?version=2022-11-18`. The "Code snippets" section is active, displaying a Python code snippet for making a prediction request. The code includes comments for setting the API key and token, and for defining the input data and headers.

```
import requests

# NOTE: you must manually set API_KEY below using information retrieved from your IBM Cloud account.
API_KEY = "your API key"
token_response = requests.post('https://iam.cloud.ibm.com/identity/token', data={"apikey":
API_KEY, "grant_type": 'urn:ibm:params:oauth:grant-type:apikey'})
mltoken = token_response.json()["access_token"]

header = {'Content-Type': 'application/json', 'Authorization': 'Bearer ' + mltoken}

# NOTE: manually define and pass the array(s) of values to be scored in the next line
payload_scoring = {'input_data': [{'fields': [array_of_input_fields], "values": [array_of_values_to_be_scored, another_array_of_values_to_be_scored]}]}

response_scoring = requests.post('https://us-south.ml.cloud.ibm.com/ml/v4/deployments/7bd5f243-a51d-4bbe-bed0-8b3559609908/predictions?version=2022-11-18', json=payload_scoring,
headers={'Authorization': 'Bearer ' + mltoken})
```

In IBM Watson Knowledge Studio , the creation of the machine learning model involves training the machine learning model and evaluating how well the model performed when annotating test data and blind data.

Creating a machine learning model

When you create a machine learning model, you select the document sets that you want to use to train the model and specify the percentage of documents that are to be used as training data, test data, and blind data.

About this task

By exploring the performance metrics, you can identify ways to improve the model's accuracy.

Procedure

To create a machine learning model:

Log in as a Knowledge Studio administrator and select your workspace.

Select Machine Learning Model > Performance.

Verify that all of the document sets have been approved and that all annotation conflicts have been resolved through adjudication. Only documents that have become ground truth through adjudication or approval can be used to train the model.

Click Train and evaluate.

Click Train and evaluate.

See Document set management for help determining which ratios to apply.

Click Train to train the model, or click Train & Evaluate to train the model, evaluate annotations added by the machine learning model, and analyze the performance statistics.

Select the document sets that you want to use for training the model.

Evaluating annotations added by the model

You can compare the ground truth view for annotations added by human annotators to the annotations on the model.