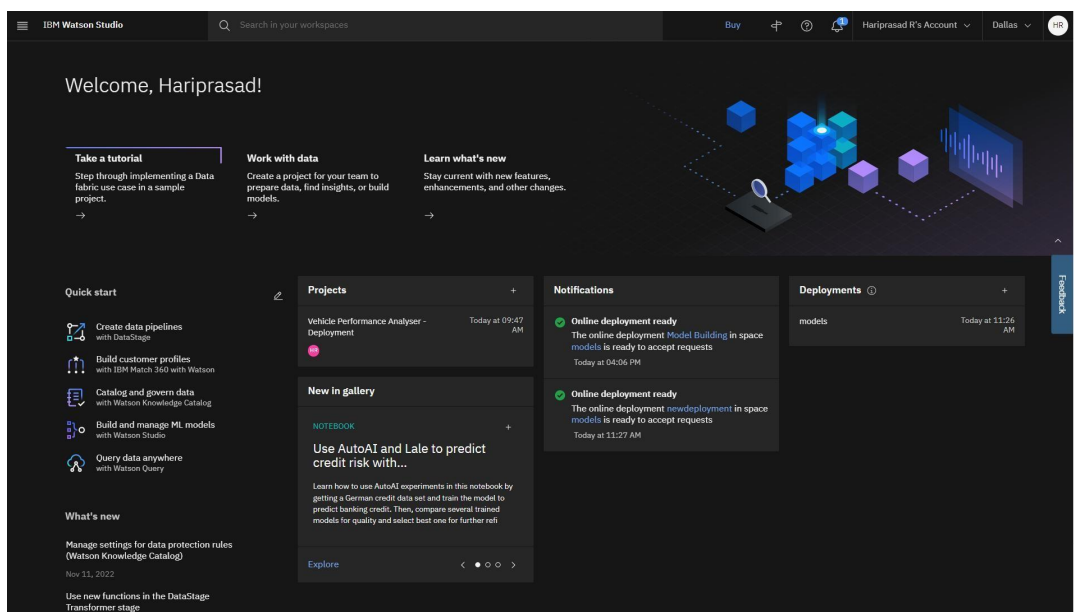


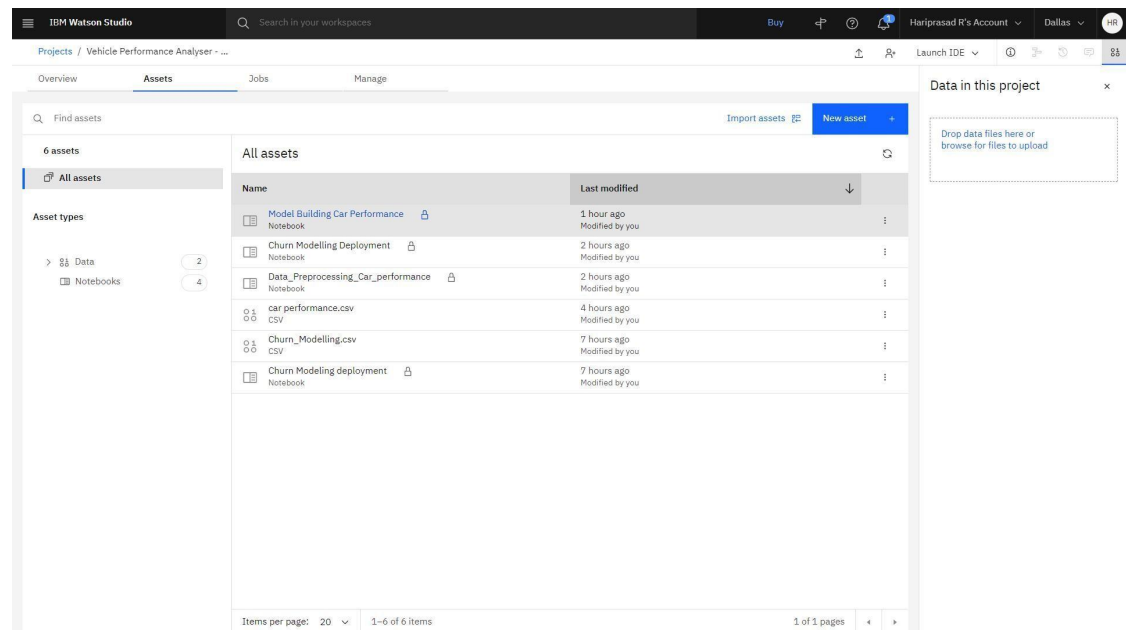
# Train Model on IBM

Date	16 - November - 2022
Team ID	PNT2022TMID49883
Project Name	Machine Learning based Vehicle Performance Analyzer

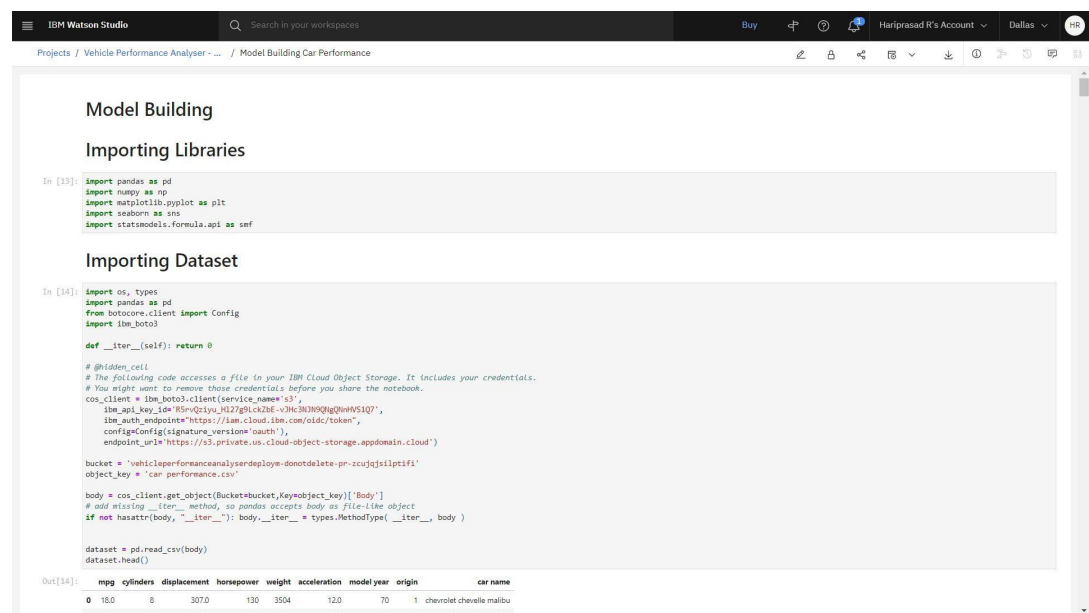
## 1. Training the ML Model in IBM Watson Studio:



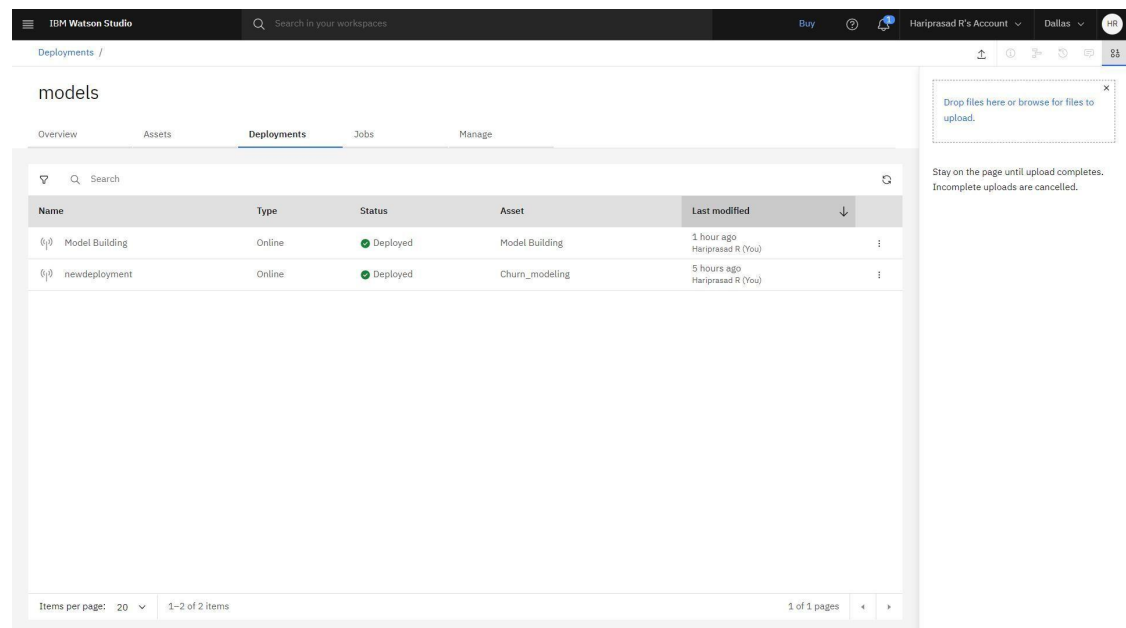
## 2. Model for Vehicle performance has been created using Jupyter Notebook.



## Dataset: Car\_performance.csv Churn\_Modeling.csv

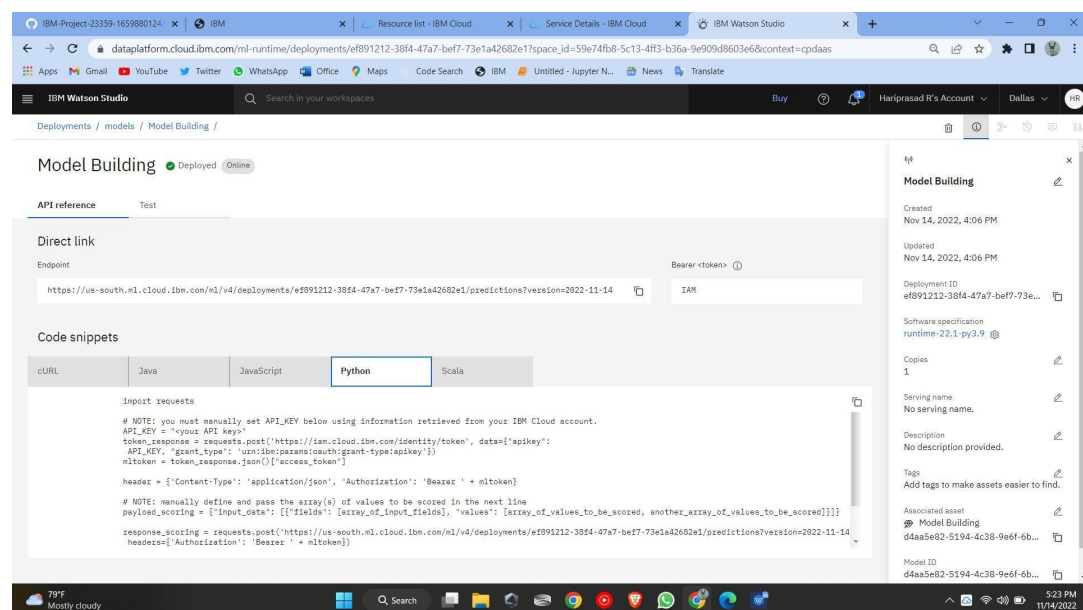


### 3. Model for Vehicle performance has been created using Jupyter Notebook and Deployed under “models” space.



The screenshot shows the IBM Watson Studio interface. At the top, there's a navigation bar with 'IBM Watson Studio', a search bar, and user information. Below this, the 'Deployments' tab is selected, showing a list of models. The table has columns: Name, Type, Status, Asset, and Last modified. Two models are listed: 'Model Building' and 'newdeployment', both with a status of 'Deployed'. A sidebar on the right contains a file upload area and a message: 'Stay on the page until upload completes. Incomplete uploads are cancelled.'

Name	Type	Status	Asset	Last modified
Model Building	Online	Deployed	Model Building	1 hour ago Hariprasad R (You)
newdeployment	Online	Deployed	Churn_modeling	5 hours ago Hariprasad R (You)



The screenshot shows the IBM Watson Studio interface for a specific model deployment. The 'Model Building' tab is selected, showing the 'API reference' and 'Test' sections. The 'Direct link' section displays the endpoint URL and a Bearer token. The 'Code snippets' section shows a Python code snippet for making a POST request to the endpoint. A sidebar on the right contains metadata for the model, including 'Created', 'Updated', 'Deployment ID', 'Software specification', 'Copies', 'Serving name', 'Description', 'Tags', 'Associated asset', and 'Model ID'.

**Model Building** Deployed Online

**API reference** Test

**Direct link**

Endpoint: `https://us-south-1.cloud.ibm.com/ml/v4/deployments/ef891212-38f4-47a7-be7f-73e1a42682e1?space_id=59e74fb8-5c13-4ff3-b36a-9e909d8603e6&context=cpdaas`

Bearer token: `IAH`

**Code snippets**

`cURL` `Java` `JavaScript` `Python` `Scala`

```
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'})
mtoken = token_response.json()['access_token']

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

# 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-1.cloud.ibm.com/ml/v4/deployments/ef891212-38f4-47a7-be7f-73e1a42682e1/predictions?version=2022-11-14',
headers={'Authorization': 'Bearer ' + mtoken})
```

**Model Building**

Created: Nov 14, 2022, 4:06 PM

Updated: Nov 14, 2022, 4:06 PM

Deployment ID: ef891212-38f4-47a7-be7f-73e...

Software specification: runtime-22.1-py3.9

Copies: 1

Serving name: No serving name.

Description: No description provided.

Tags: Add tags to make assets easier to find.

Associated asset: Model Building d4aa5e82-5194-4c38-9e6f-6b...

Model ID: d4aa5e82-5194-4c38-9e6f-6b...