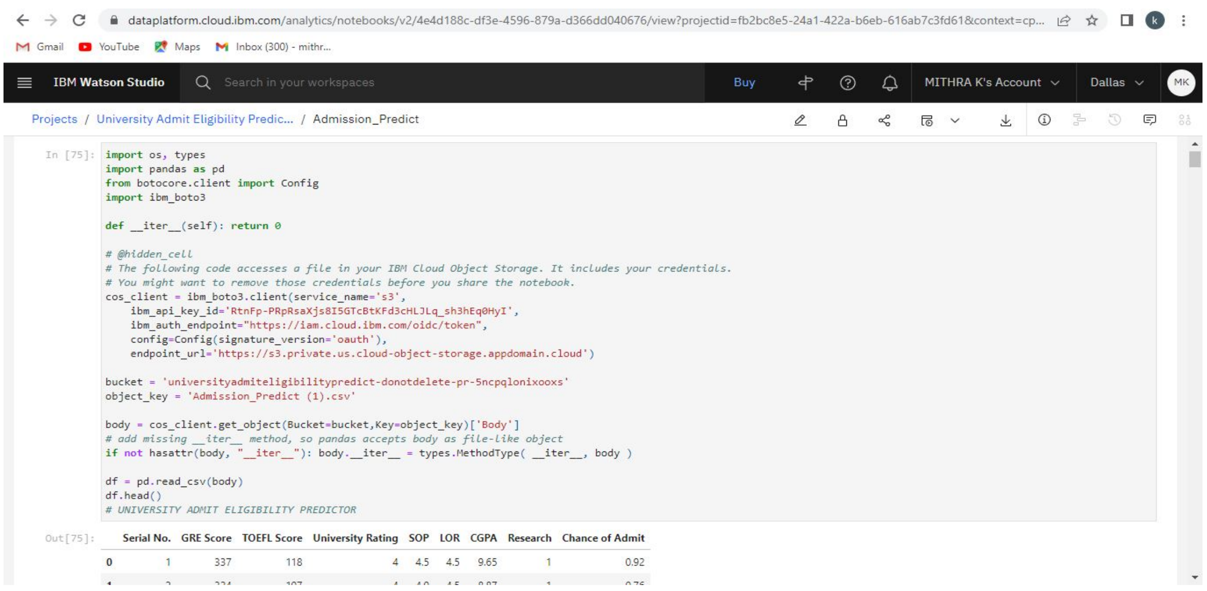
PROJECT DEVELOPMENT PHASE

SPRINT – 4

IBM CLOUD DEPLOYMENT



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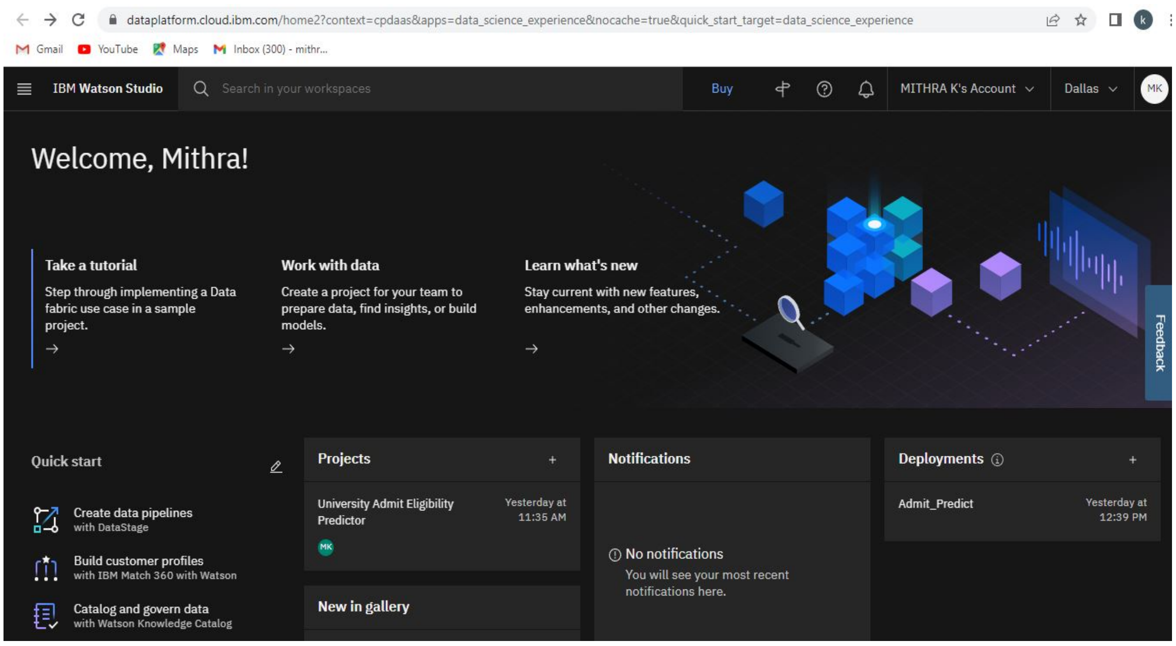
Projects / University Admit Eligibility Predic... / Admission_Predict

```
In [75]: 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='RtnFp-PRpRsaXjs8I5GTcBtKFd3cHLJLq_sh3hEq0HyI',
             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 = 'universityadmiteligibilitypredict-donotdelete-pr-5ncpqlonixooxs'
         object_key = 'Admission_Predict (1).csv'

         body = cos_client.get_object(Bucket=bucket,Key=object_key)['Body']
         # add missing __iter__ method, so pandas accepts body as file-like object
         if not hasattr(body, "__iter__"): body.__iter__ = types.MethodType( __iter__, body )

         df = pd.read_csv(body)
         df.head()
         # UNIVERSITY ADMIT ELIGIBILITY PREDICTOR
```

Out[75]:

	Serial No.	GRE Score	TOEFL Score	University Rating	SOP	LOR	CGPA	Research	Chance of Admit
0	1	337	118	4	4.5	4.5	9.65	1	0.92



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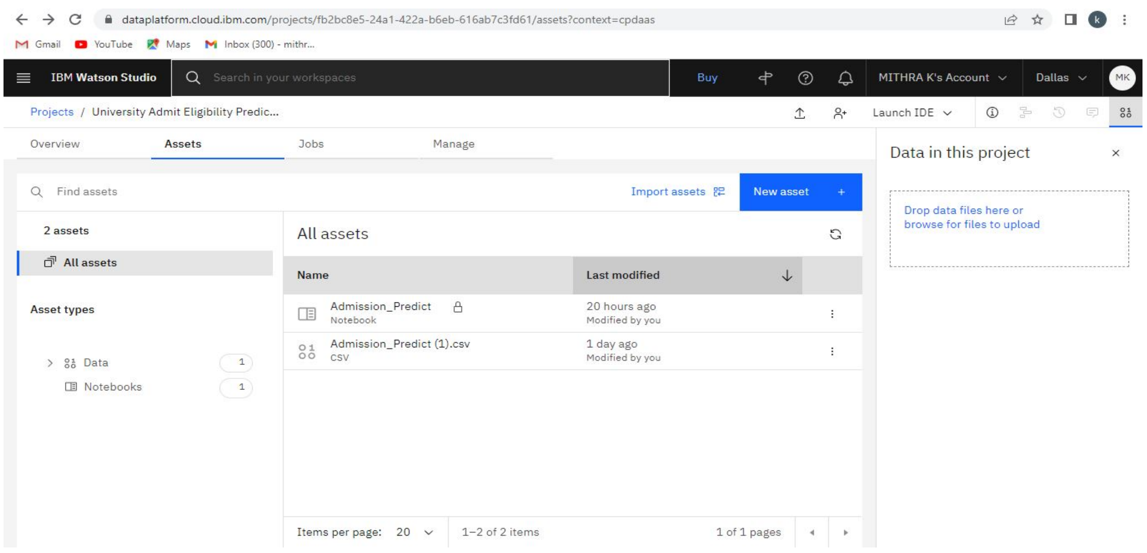

Name	Last modified
Admission_Predict Notebook	20 hours ago Modified by you
Admission_Predict (1).csv CSV	1 day ago Modified by you

IBM_APP.PY

```
import joblib

from flask import Flask , request, render_template

from math import ceil

import requests


# NOTE: you must manually set API_KEY below using information retrieved from your IBM Cloud account.

API_KEY = "ACsP3Bo6BnmCyRBl66ImEMRM6P3BbdmHMeuQcxVBCMBw"

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}

app = Flask(__name__)

model = joblib.load("model.pkl")
```

```
@app.route('/')
def index():
return render_template('index.html')

@app.route('/predict',methods = ['GET','POST'])
def admin():
    gre=(eval(request.form["gre"])-290)/(340-290)
    tofl=(eval(request.form["tofl"])-92)/(120-92)
    rating=(eval(request.form["rating"])-1.0)/4.0
    sop=(float(request.form["sop"])-1.0)/4.0
    lor=(float(request.form["lor"])-1.0)/4.0
    cgpa=(float(request.form["cgpa"])-5.5)/(10-5.6)
    research=request.form["research"]
    if (research=="Yes"):
        research=1
    else:
        research=0

    array_of_input_fields = ['gre', 'tofl', 'rating', 'sop', 'lor', 'cgpa', 'research']
    array_of_values_to_be_scored = [gre, tofl, rating, sop, lor, cgpa, research]
    payload_scoring = {"input_data": [{"fields": [array_of_input_fields],
"values": [array_of_values_to_be_scored]}]}
    response_scoring = requests.post('https://us-
south.ml.cloud.ibm.com/ml/v4/deployments/8244ff58-07bb-481d-becc-
c4ad94411dc5/predictions?version=2022-11-18', json=payload_scoring,
headers={'Authorization': 'Bearer ' + mltoken})
    prediction = response_scoring.json()['predictions'][0]['values'][0][0]

    if (prediction > 0.5):
        return render_template("chance.html",p=str(ceil(prediction *100)) +" %")
    return render_template("nochance.html")
if __name__ == '__main__':
    app.run(debug = True, port=5500)
```