SPRINT-4

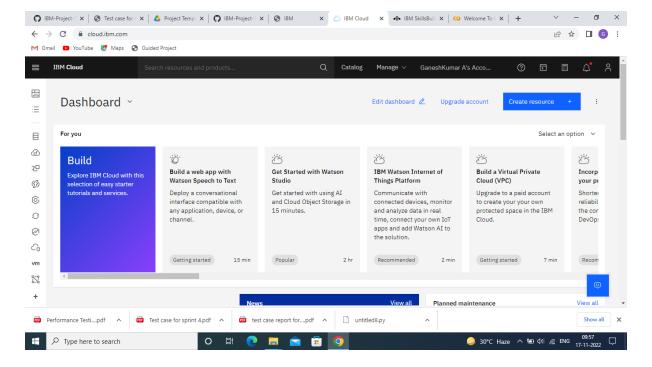
TRAIN THE MODEL ON IBM

Team id	PNT2022TMID45520
Project name	DemandEst - AI powered Food
	Demand Forecaster

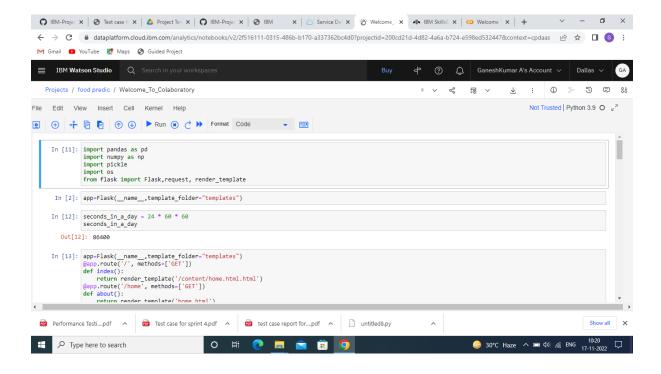
TRAIN THE MODEL ON IBM

Register For IBM Cloud:

- Please register for IBM
- Please log in to IBM Account



Train The ML Model On IBM:



Integrate Flask With Scoring End Point:

import the necessary packages

import Integrate Flask With Scoring End Point:

pandas as pd

import numpy as np

import pickle

import os

import requests

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

```
API_KEY = "68w9XBNJLBQFtHM2rG_aouV4LmlF-EtecYrhIQBQbt_K"
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}
from flask import Flask, request, render_template
app = Flask(__name__, template_folder="/content/app.py")
@app.route('/', methods=['GET'])
def index():
  return render_template('/content/home.html.htmlhome.html')
@app.route('/home', methods=['GET'])
def about():
  return render_template('/content/home.html.html')
@app.route('/pred', methods=['GET'])
def page():
  return render_template('/content/home.html.html')
```

```
@app.route('/predict', methods=['GET', 'POST'])
def predict():
  print("[INFO] loading model...")
  # model = pickle.load(open('fdemand.pkl', 'rb'))
  input_features = [int(x) for x in request.form.values()]
  print(input_features)
  features_value = [[np.array(input_features)]]
  print(features_value)
payload_scoring = {"input_data": [{"field": [['homepage_featured',
'emailer_for_promotion', 'op_area', 'cuisine',
                             'city_code', 'region_code', 'category']],
                       "values": [input_features]}]}
  response_scoring = requests.post(
    'https://us-south.ml.cloud.ibm.com/ml/v4/deployments/80afcaad-591d-4869-bf54-
17bbb8c70ea3/predictions?version=2022-11-14',
    json=payload_scoring, headers={'Authorization': 'Bearer ' + mltoken})
  print("Scoring response")
  print(response_scoring.json())
  predictions = response_scoring.json()
  print(predictions)
  print('Final Prediction Result', predictions['predictions'][0]['values'][0][0])
  pred = predictions['predictions'][0]['values'][0][0]
```

```
# prediction = model.predict(features_value)

# output=prediction[0]

# print(output)'''

print(pred)

return render_template('upload.html', prediction_text=pred)
```

if __name__ == '__main__':
 app.run(debug=False)

