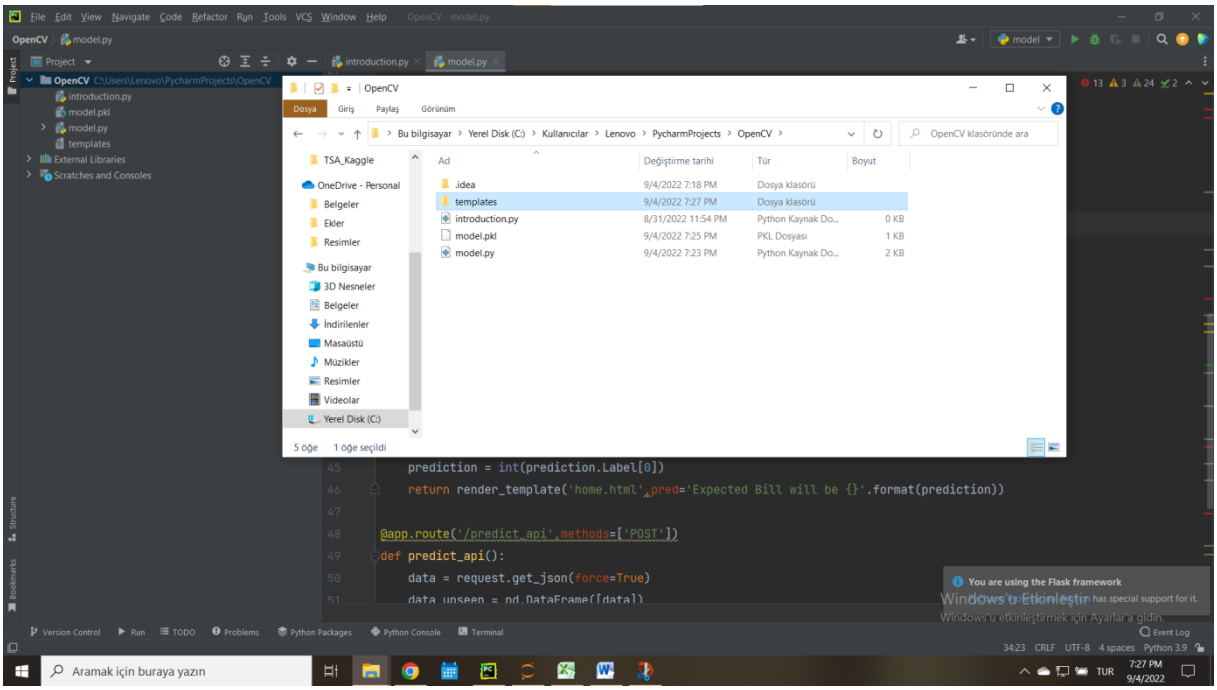
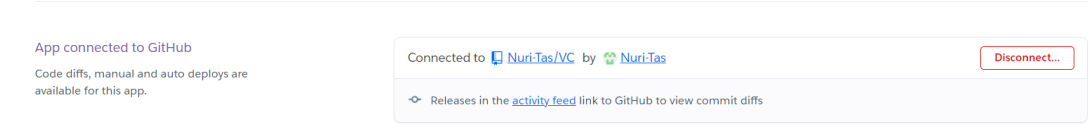
NURI TAS

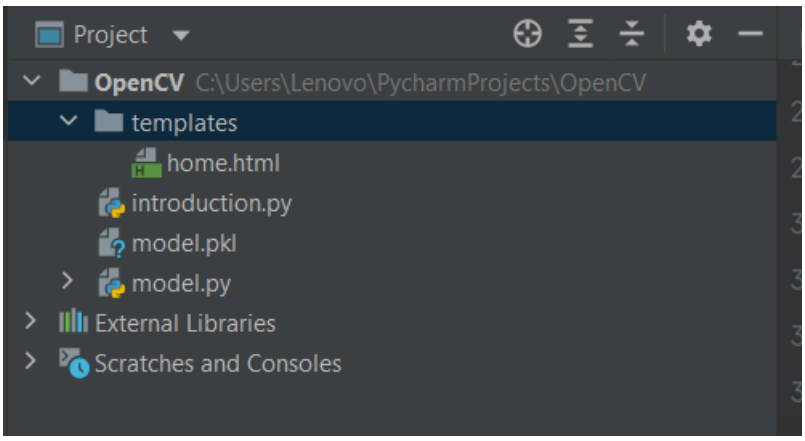
- LISUM12

DATE: 9/4/2022

Submitted to: https://github.com/Nuri-Tas/VC/tree/main/Heroku







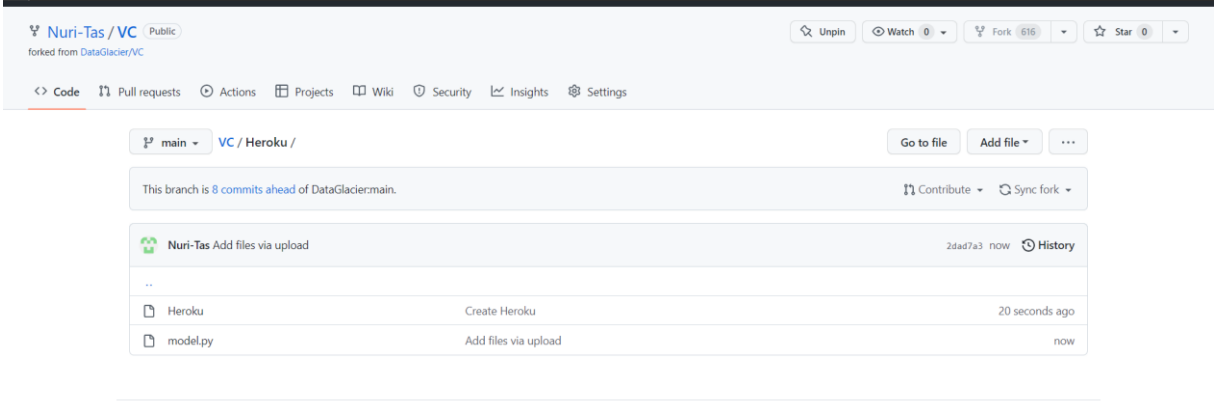
introduction.py | model.py | home.html

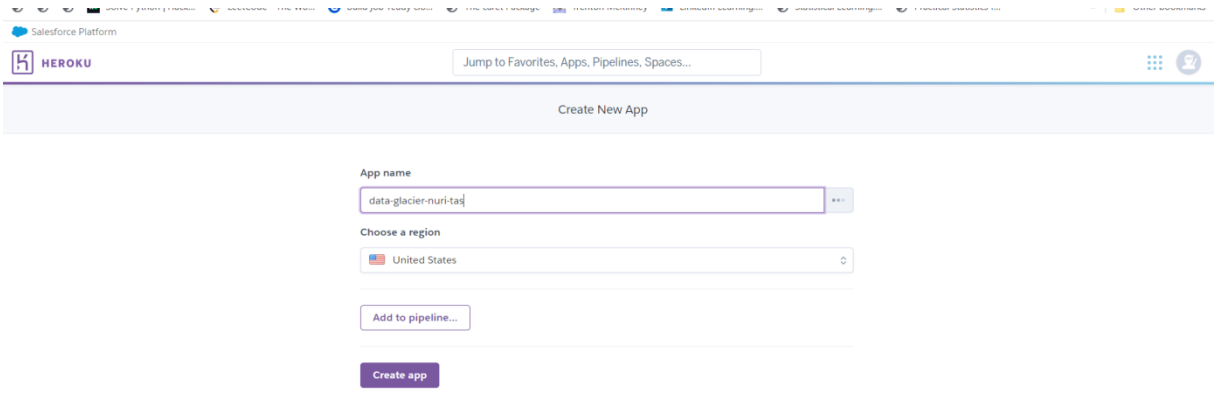
```python
import numpy as np
import pandas as pd
from sklearn.model_selection import train_test_split
from sklearn.linear_model import LinearRegression
import pickle

dataset = pd.read_csv('C:/Users/Lenovo/Desktop/TSA_Kaggle/tunnel.csv')
dataset['lag'] = dataset.NumVehicles.shift(1)

X = dataset.loc[1:, ['lag']].values
y = dataset.loc[1:, ['NumVehicles']].values
# Splitting the dataset into the Training set and Test set
X_train, X_test, y_train, y_test = train_test_split(X, y, test_size = 1/3, random_state = 0)
# Fitting Simple Linear Regression to the Training set
regressor = LinearRegression()
regressor.fit(X_train, y_train)
# Predicting the Test set results
y_pred = regressor.predict(X_test)
# Saving model to disk
pickle.dump(regressor, open('model.pkl','wb'))
# Loading model to compare the results
model = pickle.load(open('model.pkl','rb'))
```

You are using the Flask framework

```python
from flask import Flask,request, url_for, redirect, render_template, jsonify

import pandas as pd
import pickle
import numpy as np
# Initalise the Flask app
app = Flask(__name__)

cols = dataset.columns
@app.route('/')
def home():
    return render_template("home.html")

@app.route('/predict',methods=['POST'])
def predict():
    int_features = [x for x in request.form.values()]
    final = np.array(int_features)
    data_unseen = pd.DataFrame([final], columns = cols)
    prediction = predict_model(model, data=data_unseen, round = 0)
    prediction = int(prediction.Label[0])
    return render_template('home.html',pred='Expected Bill will be {}'.format(prediction))
```

```python
@app.route('/predict_api',methods=['POST'])
def predict_api():
    data = request.get_json(force=True)
    data_unseen = pd.DataFrame([data])
    prediction = predict_model(model, data=data_unseen)
    output = prediction.Label[0]
    return jsonify(output)

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





Manual deploy

Deploy the current state of a branch to this app.

Deploy a GitHub branch

This will deploy the current state of the branch you specify below. Learn more.

Choose a branch to deploy

main — Deploy Branch

Receive code from GitHub

Build **main** 2dad7a34

```
-----> Determining which buildpack to use for this app
-----> Python app detected
-----> No Python version was specified. Using the buildpack default: python-3.10.6
       To use a different version, see: https://devcenter.heroku.com/articles/python-runtimes
-----> Installing python-3.10.6
-----> Installing pip 22.2.2, setuptools 63.4.3 and wheel 0.37.1
-----> Installing SQLite3
-----> Installing requirements with pip
```

Autoscroll with output — View build log

Release phase

Deploy to Heroku

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Release phase

Deploy to Heroku

Your app was successfully deployed.

View