

BUILD THE PYTHON FLASK APP

Team ID	PNT2022TMID16122
Project Name	Car Resale value Prediction

BUILD THE PYTHON FLASK APP

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import pandas as pd
import numpy as np
from flask import Flask, render_template, Response, request
import pickle
from sklearn.preprocessing import LabelEncoder
import pickle

app=Flask(__name__, template_folder='templates/')
filename = 'resale_model.sav'
model_rand = pickle.load(open(filename, 'rb'))

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

@app.route('/resaleintro.html')
def p():
    return render_template('resaleintro.html')

@app.route('/predict')
def predict():
    return render_template('resalepredict.html')

@app.route('/y_predict', methods=['GET', 'POST'])
def y_predict():
    regyear = int(request.form['regyear'])
    powerps = float(request.form['powerps'])
    kms = float(request.form['kms'])
    regmonth = int(request.form.get('regmonth'))
    gearbox = request.form['gearbox']
    damage = request.form['dam']
    model = request.form.get('model_type')
    brand = request.form.get('brand')
    fuelType = request.form.get('fuel')
    vehicletype = request.form.get('vehicletype')
    new_row =
{'yearOfRegistration': regyear, 'powerPS': powerps, 'kilometer': kms, 'monthOfRegistration': regmonth, 'gearbox': gearbox, 'notRepairedDamage': damage, 'model': model, 'brand': brand, 'fuelType': fuelType, 'vehicleType': vehicletype}

    print(new_row)
```

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new_df =
pd.DataFrame(columns=['vehicleType', 'yearOfRegistration', 'gearbox', 'powerPS', 'model', 'kilo
meter', 'monthOfRegistration', 'fuelType', 'brand', 'notRepairedDamage'])
new_df = new_df.append(new_row, ignore_index=True)
labels = ['gearbox', 'notRepairedDamage', 'model', 'brand', 'fuelType', 'vehicleType']
mapper = {}
for i in labels:
    mapper[i] = LabelEncoder()
    mapper[i].classes_ = np.load(str('classes'+i+'.npy'), allow_pickle=True)
    tr = mapper[i].fit_transform(new_df[i])
    new_df.loc[:, i+' _Labels'] = pd.Series(tr, index=new_df.index)
labeled = new_df[ ['yearOfRegistration', 'powerPS', 'kilometer', 'monthOfRegistration'] +
[x+" _Labels" for x in labels]]

X = labeled.values
print(X)
y_prediction = model_rand.predict(X)
print(y_prediction)
return render_template('resalepredict.html', ypred="{:.2f}".format(y_prediction[0]))

if __name__ == '__main__':
    app.run(host='Localhost', debug=True, threaded=False)

```

```

(base) PS C:\Users\jerry> cd Desktop
(base) PS C:\Users\jerry\Desktop> cd IBM-PROJECT
(base) PS C:\Users\jerry\Desktop\IBM-PROJECT> python Flask.py
* Serving Flask app "Flask" (lazy loading)
* Environment: production
  WARNING: This is a development server. Do not use it in a production deployment.
  Use a production WSGI server instead.
* Debug mode: on
* Restarting with watchdog (windowsapi)
* Debugger is active!
* Debugger PIN: 119-200-533
* Running on http://Localhost:5000/ (Press CTRL+C to quit)

```