Date	19 November 2022
Team I D	PNT2022TMID39573
Project Name	Car Resale Value prediction
Maximum marks	4 Marks

- **Flask Framework:**

```python
# Import Libraries

import pandas as pd import numpy as np from flask import
Flask, render_template, Response, request import pickle
from sklearn.preprocessing import LabelEncoder
 app = Flask(__name__)#initiate flask
app
 def load_model(file='model.sav'):#load the saved
model     return pickle.load(open(file, 'rb'))

@app.route('/') def index():#main page
return render_template('car.html')

@app.route('/predict_page') def
predict_page():#predicting page
return render_template('value.html')

@app.route('/predict', methods=['GET','POST']) def
predict():
    reg_year = int(request.args.get('regyear'))
powerps = float(request.args.get('powerps'))     kms=
float(request.args.get('kms'))
    reg_month = int(request.args.get('regmonth'))
    gearbox = request.args.get('geartype')
damage = request.args.get('damage')     model
= request.args.get('model')     brand =
request.args.get('brand')     fuel_type =
request.args.get('fuelType')     veh_type =
request.args.get('vehicletype')
```

```python
        new_row = {'yearOfReg':reg_year, 'powerPS':powerps, 'kilometer':kms,
                'monthOfRegistration':reg_month, 'gearbox':gearbox,
                'notRepairedDamage':damage,
                'model':model, 'brand':brand, 'fuelType':fuel_type,
                'vehicletype':veh_type}

print(new_row)
        new_df =
pd.DataFrame(columns=['vehicletype','yearOfReg','gearbox',
'powerPS','model','kilometer','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)        transform =
mapper[i].fit_transform(new_df[i])        new_df.loc[:,i+'_labels'] =
pd.Series(transform, index=new_df.index)        labeled =
new_df[['yearOfReg','powerPS','kilometer','monthOfRegistration'] +
[x+'_labels' for x in labels]]

    X = labeled.values.tolist()
print('\n\n', X)        predict =
reg_model.predict(X)

    #predict = predictions['predictions'][0]['values'][0][0]
print("Final prediction :",predict)
    return
render_template('predict.html',predict=predict)
 if __name__=='__main__':        reg_model =
load_model()#load the saved model
app.run(debug=True)
```

```html
<!DOCTYPE html>
<nav lang="en" dir="ltr">
  <head>
    <style>
      :root {

  --typewriterSpeed: 6s;
} body {
margin:0;
        background-
color:peachpuff;
} h1 {
position:relative;
font-size:4rem;
position:relative;
    } a{    text-
decoration: none;
}
.bg{    margin:50px
170px;
 } button{    margin-
left: 650px;
  background-color: lightgreen;
} h1::before,
h1::after
{    content:"";
position:absolute;
top:0;    bottom:0;
left:0;    right:0;
}

h1::before
{    background:peachpuff;
animation:typewritter 6s steps(28) 2s forwards; }
```

```css
h1::after
{     width:0.125em;
background:black;
animation:
    typewritter 6s steps(28) 2s forwards,
blink 730ms steps(28) infinite,     blinks
12s steps(28) forwards;
}
@keyframes blinks
{     to{        background-
color:peachpuff;
    }
}
@keyframes typewritter
{
to{left:100%;}
}


@keyframes blink
{     to{     background-
color:transparent;
    }
}


.subtitle
{   display:grid;    place-
content:center;    text-
align:center;      color:hsl(0 0%
0%/0.7);     font-size:2rem;
font-weight:400;     opacity:0;
transform: translateY(3rem);
    animation: fade 2s ease 8s forwards;

}


@keyframes fade {    to {
opacity: 1;     transform:
translateY(0);
   }
}
            div {text-align:
center;}
 </style>
```

```
    <meta charset="utf-8">
    <title>Car resale value </title>
    <link rel="stylesheet" href="../static/css/style.css">
    <link rel="stylesheet"
href="https://cdnjs.cloudflare.com/ajax/libs/fontawesome/4.7.0/css/font-
awesome.min.css">
  </head>
  <body>


    <section class="header">
      <div class="text-box">
        <h1 class="bg">CAR RESALE VALUE PREDICTION</h1>
        <p class="subtitle">welcome to our webpage</a></p>
<br>
        <button        class="subtitle        "><a        href="./predict_page"
style="fontsize:30px" >Check price</a></button>
        <a href='https://postimg.cc/kB3n3Ss8' target='_blank'><img
src='https://i.postimg.cc/kB3n3Ss8/drift2.jpg'          border='0'
style="width:600px"alt='drift2'/></a>


      </div>
    </section>
  </nav>
    </body>
    </body>
  </body>
</html>
```
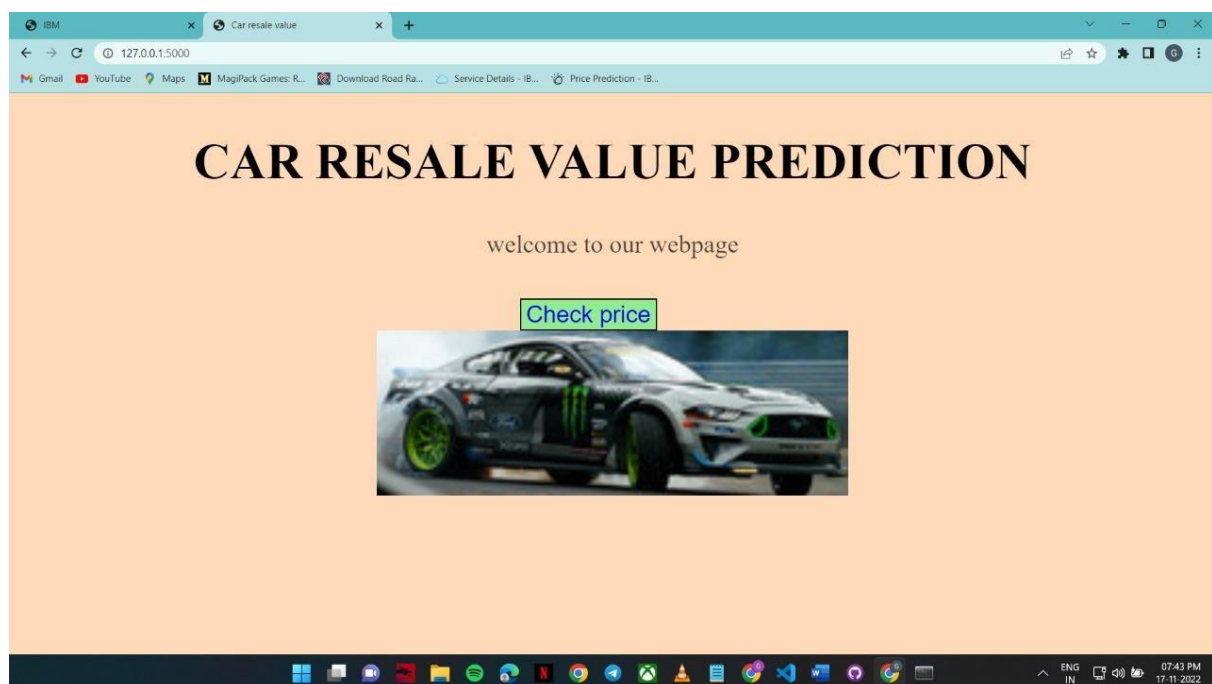
Application Web page:

Accurate Resale Value of Your Car

Registration year : 2011

Registration Month : 3

Power of car in PS: 190

Kilometers that car have driven : 70000

Gear type : ⦿ Manual ○ Automatic ○ Not declared

Your car is repaired or damaged : ○ Yes ⦿ No ○ Not declared

Model Type : Navara

Power of car in PS: 190

Kilometers that car have driven : 70000

Gear type : ⦿ Manual ○ Automatic ○ Not declared

Your car is repaired or damaged : ○ Yes ⦿ No ○ Not declared

Model Type : Navara

Brand : Nissan

Fuel Type : Diesel

Vehicle type: SUV

Submit

IBM   ×   Car Resale Predicted Value   ×   +

← → C   ① 127.0.0.1:5000/predict?regyear=2011&regmonth=3&powerps=190&kms=70000&geartype=manual&damage=no&model=navara&brand=nissan&fuelType=diesel&vehicletype=suv&Submi...

M Gmail   ▶ YouTube   ♥ Maps   M MagiPack Games: R...   Download Road Ra...   Service Details - IB...   Price Prediction - IB...
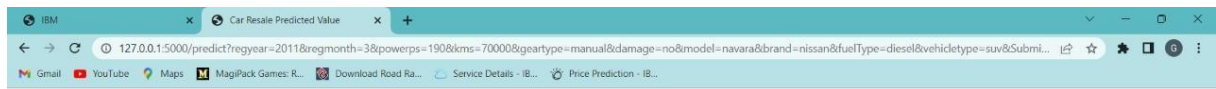
The Predicted Car Resale Value is

₹[16984.07610861]