

Practical-5

Deployment of ML project using Flask.

Task 1: Install the required libraries

```
pip install Flask
```

Task 2: Follow the steps described in theory material to deploy the model using Flask. Run the flask application to execute the deployed model.

Step :1 Create Templates

| Name | Type | Size |
|--------------|--------------------|------|
| static | File folder | |
| templates | File folder | |
| app_final.py | Python Source File | 5 KB |

| | | |
|-----------------|---------------------|-------|
| car.html | Chrome HTML Do... | 29 KB |
| cpp.html | Chrome HTML Do... | 8 KB |
| index.html | Chrome HTML Do... | 15 KB |
| infomation.html | Chrome HTML Do... | 7 KB |
| lap.html | Chrome HTML Do... | 33 KB |
| lpp.html | Chrome HTML Do... | 10 KB |
| README.md | Markdown Source ... | 1 KB |
| style.css | CSS Source File | 21 KB |
| style.css.map | Linker Address Map | 11 KB |

User Interface :

Car Price Prediction

Company Name
Hyundai

Model

Transmission Type
Automatic

Year Of Purchase
2021

Fuel type
Petrol

Kms Travelled
Enter No of kms Driven

Predict Price



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Step: 2 Import the Model, Dataset, and Scalar objects into the project folder.

| | | |
|-------------------------|---------------------|-------------|
| Datasets | 30-06-2023 06:57 PM | File folder |
| Group Members | 30-12-2022 07:43 PM | File folder |
| Laptop_Price_Prediction | 07-05-2023 06:36 AM | File folder |
| model | 30-12-2022 08:13 PM | File folder |
| PPT | 27-12-2022 02:54 PM | File folder |
| README | 01-07-2023 07:21 PM | File folder |
| Report | 02-05-2023 12:48 PM | File folder |
| UI | 28-06-2023 02:38 PM | File folder |

Step: 3 Create the app.py file to serve the deployment

```

app_final.py X
D: > Capstone Project-1 > UI > New UI > app_final.py > ...
You, 5 months ago | 1 author (You)
1 from flask import Flask, render_template, request, url_for
2 from flask_cors import CORS, cross_origin
3 import pandas as pd
4 import numpy as np
5 import pickle
6
7 app = Flask(__name__)
8 cors=CORS(app)
9 model1=pickle.load(open("D:\Capstone Project-1\Car Price Prediction\LinearRegressionModel.pkl", 'rb'))
10 pipe = pickle.load(open("D:\Capstone Project-1\Laptop_Price_Prediction\pipe.pkl", 'rb'))
11 # df = pickle.load(open('df.pkl', 'rb'))
12 # model1='LinearRegressionModel.pkl'
13 car=pd.read_csv("D:\Capstone Project-1\Car Price Prediction\cardekho_updated.csv")
14 # df=pd.read_csv("D:\Capstone Project-1\Laptop_Price_Prediction\Laptop_data_final.csv")
15 df=pd.read_csv("D:\Capstone Project-1\Laptop_Price_Prediction\lappy.csv")
16
17 You, 7 months ago * temp_harshil
18 #Main Page
19 @app.route('/')
20 def index():
21     return render_template('index.html')
22

```

Code : app.py

```
from flask import Flask , render_template,request,url_for
from flask_cors import CORS,cross_origin
import pandas as pd import numpy as np
import pickle

app = Flask(__name__) cors=CORS(app)
model1=pickle.load(open("D:\Capstone Project-1\Car Price
Prediction\LinearRegressionModel.pkl",'rb'))

car=pd.read_csv("D:\Capstone Project-1\Car Price Prediction\cardekho_updated.csv")

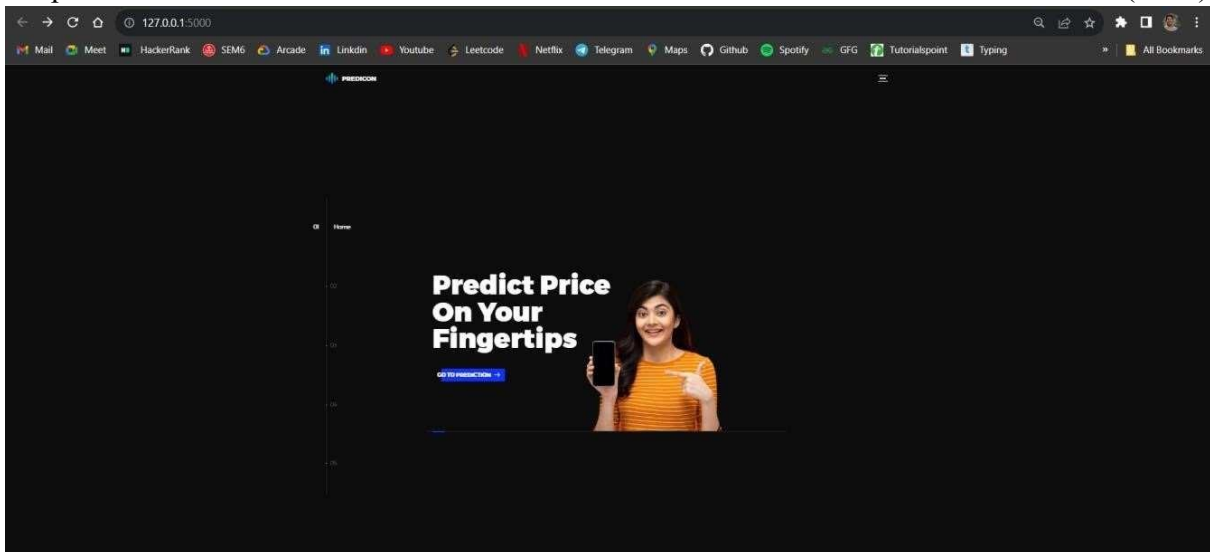
#Main Page
@app.route('/') def index():    return
render_template('index.html')

#Car Price Prediction
@app.route('/cpp') def
cpp():
    #model=sorted(car['full_name'].unique())
    car_models=sorted(car['full_name'].unique())    companies=(car['company'].unique())
    transmission_type=sorted(car['transmission_type'].unique())
    year=sorted(car['year'].unique(),reverse=True)
    fuel_type=car['fuel_type'].unique()    km_driven=(request.form.get('km_driven'))

    return
render_template('car.html',companies=companies,car_models=car_models,transmission_type=trans
mission_type, year=year, fuel_type=fuel_type,km_driven=km_driven)

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

Output :



Car Price Prediction

Company Name

Maruti

Model

Maruti A Star

Transmission Type

Manual

Year Of Purchase

2011

Fuel type

Petrol

Kms Travelled

80000

Predict Price

Predicted Price : ₹76396.28



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