

Practical-5

Deployment of ML project using Flask.

Task 1: Install the required libraries

```
pip install Flask
```

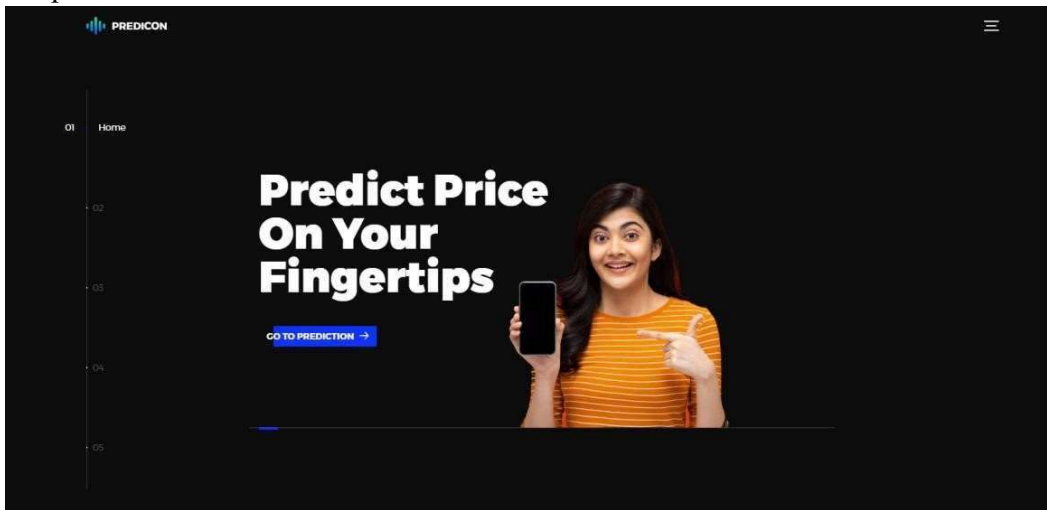
Task 2: Follow the steps described in theory material to deploy the model using Flask. Run the flask application to execute the deployed model.

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
information.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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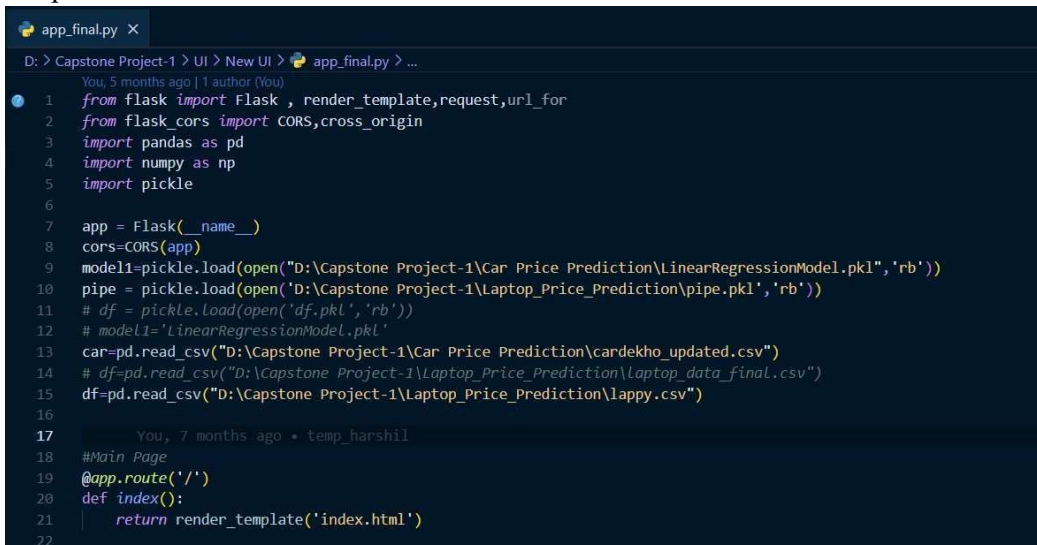
HONDA



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
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)

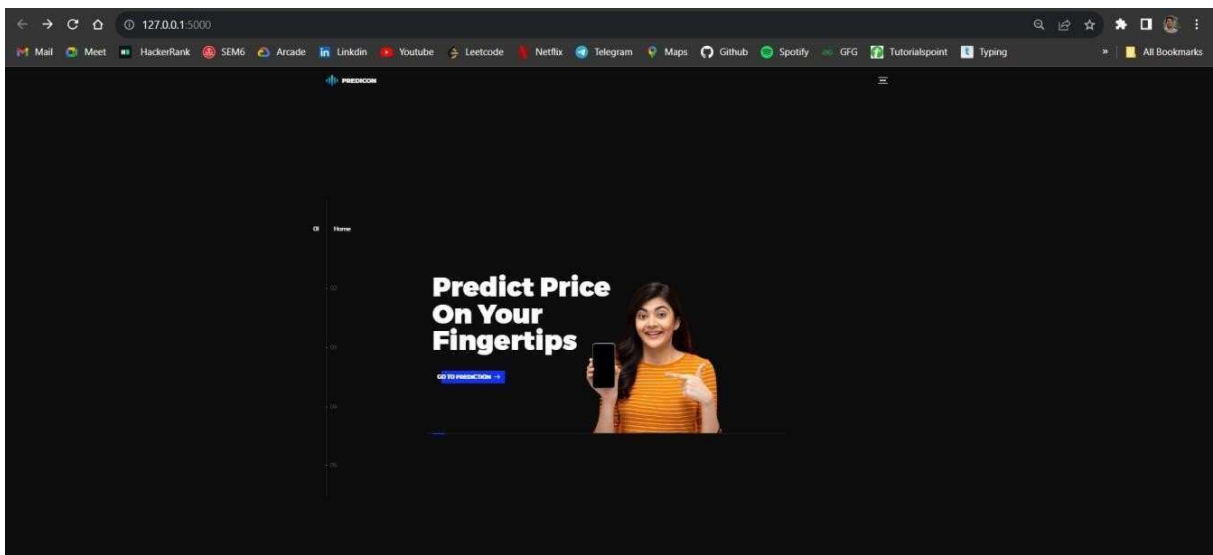
```

MLOps

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```
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



ISUZU



SUBARU

HONDA



NISSAN



**LAND
-ROVER**



HYUNDAI



SUZUKI

