

Week4

week4.py

```
import numpy as np
from flask import Flask, request, render_template, url_for
import pickle
import csv

app=Flask(__name__)
model = pickle.load(open('model.pkl','rb'))

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

@app.route("/predict",methods=["POST"])
def predict():
    int_features = [int(x) for x in request.form.values()]
    features=np.array(int_features)
    prediction = model.predict(features)
    output = round(prediction[0],2)

    return render_template('index.html',prediction_text='Travel Cost should
be $ {}'.format(output))

with app.test_request_context():
    print(url_for('predict'))

if __name__=='__main__':
    app.run(port=5000,debug=True)
```

index.html

```
<!DOCTYPE html>
<html >
<head>
    <meta charset = "UTF-8">
```

```

    <title>Cab</title>
</head>
<body>
    <div class = "login">
        <h1>
            Predict Travel Cost
        </h1>
        <form action=" {{ url_for('predict') }} " method="post">
            <input type="text" name="KM Travelled" placeholder="KM Travelled"
required="required" />
            <input type="text" name="Price of Trip" placeholder="Price of Trip"
required="required" />

            <button type="submit" class="btn btn-primary btn-block
btn-large">Predict</button>
        </form>
    </div>
<br>
<br>
    {{ prediction_text }}
</body>
</html>

```

File.py

```

import pandas as pd
import pickle
from sklearn.model_selection import train_test_split
from sklearn.linear_model import LinearRegression

cab = pd.read_csv('Cab.csv')

```

```

x=cab[['KM Travelled', 'Price Charged']]
y=cab['Cost of Trip']
x_train,x_test,y_train,y_test = train_test_split(x,y,test_size=0.3, random_state=101)

```

```

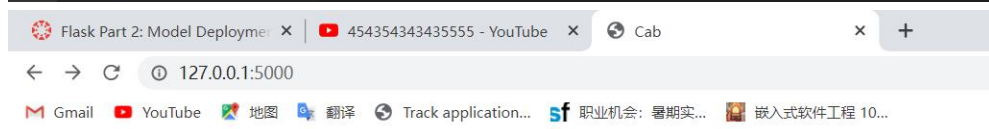
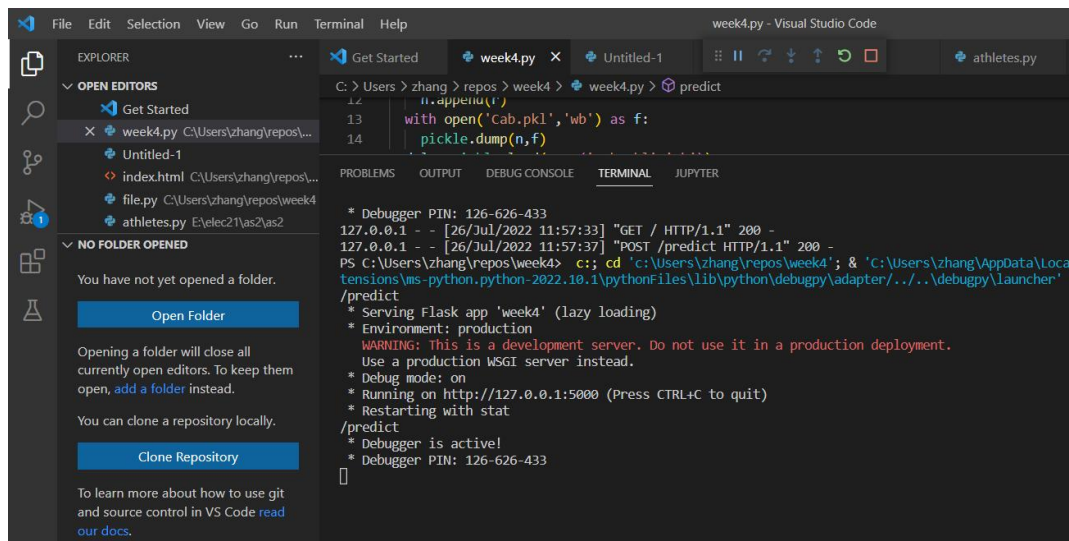
lm=LinearRegression()
lm.fit(x_train,y_train)

```

```

pickle.dump(lm, open('model.pkl', 'wb'))

```



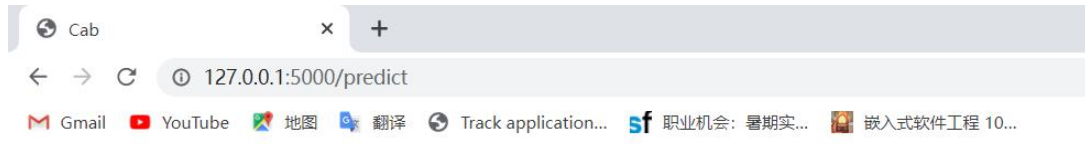
Predict Travel Cost

| | | |
|---|--|--|
| <input type="text" value="KM Travelled"/> | <input type="text" value="Price of Trip"/> | <input type="button" value="Predict"/> |
|---|--|--|



Predict Travel Cost

| | | |
|---------------------------------|----------------------------------|--|
| <input type="text" value="11"/> | <input type="text" value="222"/> | <input type="button" value="Predict"/> |
|---------------------------------|----------------------------------|--|



Predict Travel Cost

| | | |
|---|--|--|
| <input type="text" value="KM Travelled"/> | <input type="text" value="Price of Trip"/> | <input type="button" value="Predict"/> |
|---|--|--|

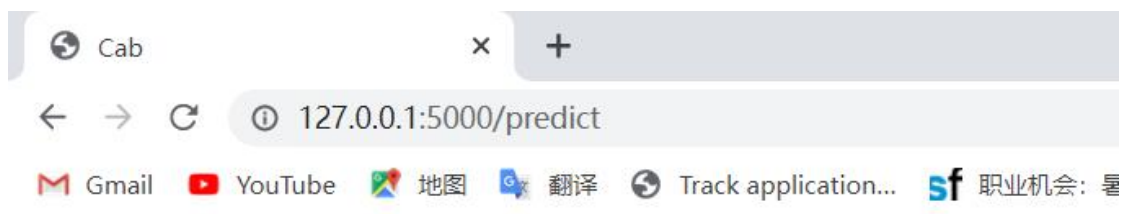
Travel Cost should be \$ 140.63



Predict Travel Cost

| | | |
|---------------------------------|----------------------------------|--|
| <input type="text" value="22"/> | <input type="text" value="333"/> | <input type="button" value="Predict"/> |
|---------------------------------|----------------------------------|--|

Travel Cost should be \$ 140.63



Predict Travel Cost

| | | |
|---|--|--|
| <input type="text" value="KM Travelled"/> | <input type="text" value="Price of Trip"/> | <input type="button" value="Predict"/> |
|---|--|--|

Travel Cost should be \$ 273.01