

Week4 : Deployment on Flask

Name : Vasu Sharma

Batch : LISUM22(30 May, 2023 to 30 August, 2023)

Submission date : July 3, 2023

Submitted to

1. Data Used for Modelling:

	A	B	C	D	E	F	G	H	I	J	K	
1		YearsExpe	Salary									
2	0	1.2	39344									
3	1	1.4	46206									
4	2	1.6	37732									
5	3	2.1	43526									
6	4	2.3	39892									
7	5	3	56643									
8	6	3.1	60151									
9	7	3.3	54446									
10	8	3.3	64446									
11	9	3.8	57190									
12	10	4	63219									
13	11	4.1	55795									
14	12	4.1	56958									
15	13	4.2	57082									
16	14	4.6	61112									
17	15	5	67939									
18	16	5.2	66030									
19	17	5.4	83089									
20	18	6	81364									

2. Did data cleaning and EDA.

3. Then applied Model on this data set.

```
[8] from sklearn.linear_model import LinearRegression
    from sklearn.model_selection import train_test_split

Python

X_train, X_test, y_train, y_test = train_test_split(df_salary['YearsExperience'],
                                                    df_salary['Salary'], test_size=0.30,
                                                    random_state=101)

Python

[10] #X_train = X_train.values

X_train = X_train.values.reshape(-1, 1)
y_train = y_train.values.reshape(-1, 1)

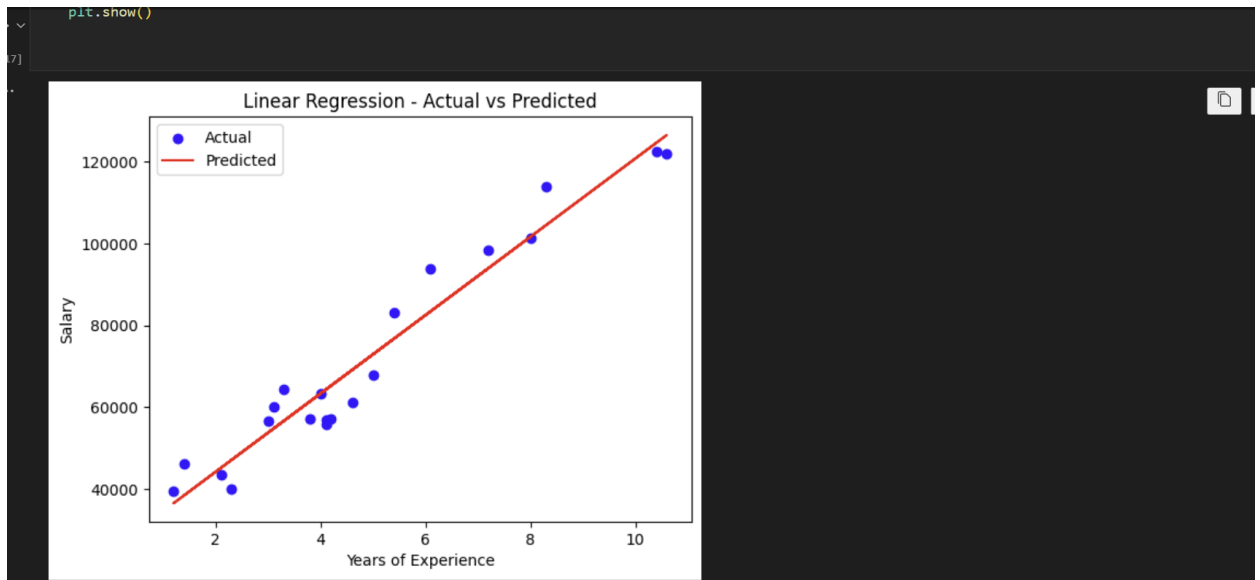
Python

[15] lm = LinearRegression()
    lm.fit(X_train, y_train)

Python

[16]
```

4. The plotted the model and plotted the linear regression model.



5. Saved this model and created a pickle file from this model.

<input checked="" type="checkbox"/>	linear_regression_model.pickle	7/4/2023 12:46 PM	PICKLE File	1 KB
<input type="checkbox"/>	Model	7/4/2023 12:46 PM	Jupyter Source File	49 KB

6. Then created html page.

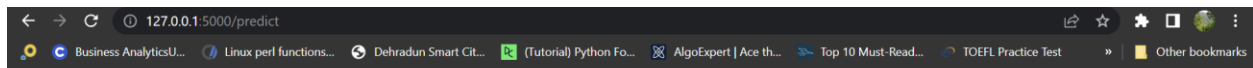
```
<!DOCTYPE html>
<html>
<head>
  <meta charset="UTF-8">
  <title>ML API</title>
  <link href="https://fonts.googleapis.com/css?family=Pacifico" rel="stylesheet" type="text/css">
  <link href="https://fonts.googleapis.com/css?family=Arimo" rel="stylesheet" type="text/css">
  <link href="https://fonts.googleapis.com/css?family=Hind:300" rel="stylesheet" type="text/css">
  <link href="https://fonts.googleapis.com/css?family=Open+Sans+Condensed:300" rel="stylesheet" type="text/css">
  <link rel="stylesheet" href="{{ url_for('static', filename='css/style.css') }}">
</head>

<body>
  <div class = "login">
    <h1>Predict Salary</h1>

    <!--Main Input For Recieving Query to out ML-->
    <form action="{{ url_for('predict') }}"method="post">
      <input type="text" name="years_experience" placeholder="Years of Experience" required="required" />
      <button type="submit" class="btn btn-primary btn-block btn-large">Predict</button>
    </form>

    <br>
    <br>
    <div>
      {{ prediction_text }}
    </div>
  </div>
</body>
</html>
```

7. Executed the application and got this page



Predict Salary

Salary Should be \$ [[44173.44098406]]