Google Ads Hourly Analysis

Date : 7-6-2023

Project Start Date - End Date	• Start Date – 07 -06 -2023 • End Date – 07 -06 2023
Objectives	• To analyses how many people who clicked on the advertisement enrolled in our course • General exploratory analyses • General descriptive analyses
Milestones accomplished the week of Start Date - End Date:	• Descriptive analyses • Exploratory analyses • Classification of data with respect to term

Contact Information

This project is performed for educational purpose of under the guidance of Siddhivinayak Sir .

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Project Abstract

Google ads hourly analysis

This is marketing analysis for a education technology company /EdTech company. In that impression indicates the visibility of the advisement, Click indicates the interested people and Sales unit indicates that purchase of the product by customer/ people .We have analysis the data using descriptive and exploratory analysis, in so further we have use linear regression algorithm .

Google ads Hourly Analysis

Importing the libraries

```
import pandas as pd
import numpy  as np
import matplotlib.pyplot as plt      # this library is used to represent data in graphical form.
```

Importing the dataset

```
file=pd.read_excel("C:/Users/MAHESH/Downloads/Marketing Data Google Ads 6th june.xlsx")
```

```
file
```

	Sr no	Impressions	Clicks	Sales Unit
0	00:00:00	258647	7759.4100	54.315870
1	00:30:00	219974	8798.9600	61.592720
2	01:00:00	1096	10.9600	0.076720
3	01:30:00	1481	14.8100	0.103670
4	02:00:00	1794	17.9400	0.125580
5	02:30:00	2156	21.5600	0.150920
6	03:00:00	413	4.1300	0.028910
7	03:30:00	144	1.4400	0.010080
8	04:00:00	139	1.3900	0.009730

Preprocessing the dataset

```
mm=file.drop("Sr no",axis=1)
```

Splitting the dataset into the Training set and Test set

```
from sklearn.model_selection import train_test_split
x_train,x_test,y_train,y_test= train_test_split(x,y, test_size=0.20, random_state=0)
```

Training the Simple Linear Regression model on the Training set

```
1 from sklearn.linear_model import LinearRegression
2 LR = LinearRegression()
3 LR.fit(x_train, y_train)      # fit function is used to train dataset
```

Predicting the Test set results

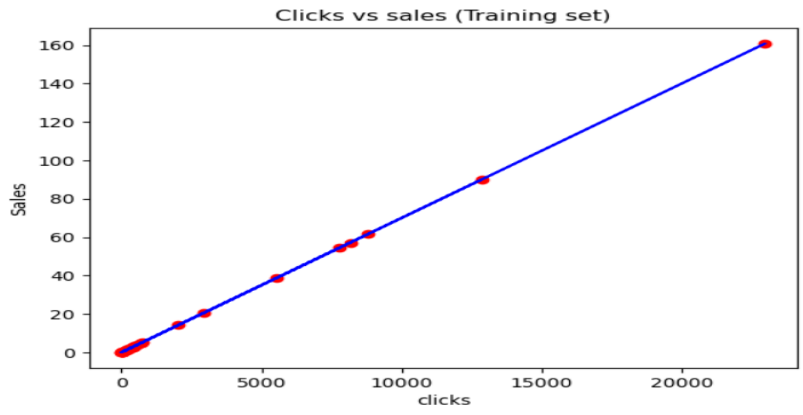
```
1 y_pred = LR.predict(x_test)
```

```
1 y_pred
```

```
array([3.7506000e+00, 1.2558000e-01, 8.6796192e+00, 3.7506000e-01,
       4.1313300e+00, 1.3864550e+01, 4.0404210e+00, 7.9058000e-01,
       1.0080000e-02, 2.7720000e-02])
```

Visualizing the Training set results

```
In [55]: plt.scatter(X_train, y_train, color = 'red')
         plt.plot(X_train, LR.predict(X_train), color = 'blue')
         plt.title('Clicks vs sales (Training set)')
         plt.xlabel('clicks')
         plt.ylabel('Sales')
         plt.show()
```



Conclusion

: From the graph we can conclude that the linear regression is giving perfect accuracy for advertisement data

Data Visualization (Using Tableau)