

Screen Time Analysis

Screen Time Analysis lets you know how much time you spend on what kind of applications and websites using your device. And screen time analysis gives a visual report.

Screen Time Analysis is the task of analyzing and creating a report on which applications and websites are used by the user for how much time.

```
In [2]: #Let's start the task of screen time analysis by importing the necessary Python
import pandas as pd
import numpy as np
import plotly.express as px
import plotly.graph_objects as go

data = pd.read_csv("Screentime-App-Details.csv")
print(data.head())
```

	Date	Usage	Notifications	Times opened	App
0	08/26/2022	38	70	49	Instagram
1	08/27/2022	39	43	48	Instagram
2	08/28/2022	64	231	55	Instagram
3	08/29/2022	14	35	23	Instagram
4	08/30/2022	3	19	5	Instagram

```
In [3]: #Let's have a look if the dataset has any null values or not:
data.isnull().sum()
```

```
Out[3]: Date          0
Usage              0
Notifications      0
Times opened      0
App               0
dtype: int64
```

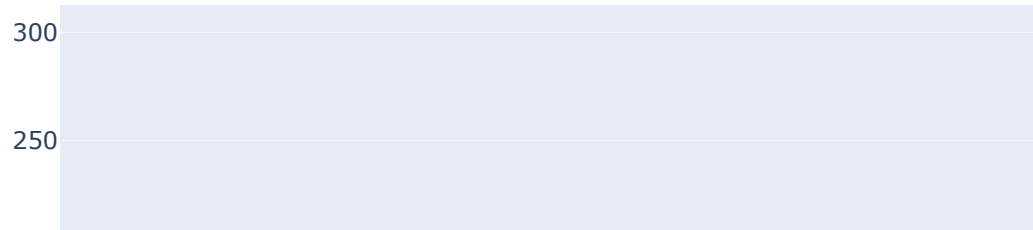
```
In [4]: #Let's have a look at the descriptive statistics of the data:
print(data.describe())
```

	Usage	Notifications	Times opened
count	54.000000	54.000000	54.000000
mean	65.037037	117.703704	61.481481
std	58.317272	97.017530	43.836635
min	1.000000	8.000000	2.000000
25%	17.500000	25.750000	23.500000
50%	58.500000	99.000000	62.500000
75%	90.500000	188.250000	90.000000
max	244.000000	405.000000	192.000000

```
In [5]: #Let's start with analyzing the screen time of the user. I will first look at th
figure = px.bar(data_frame=data,
                 x = "Date",
                 y = "Usage",
                 color="App",
```

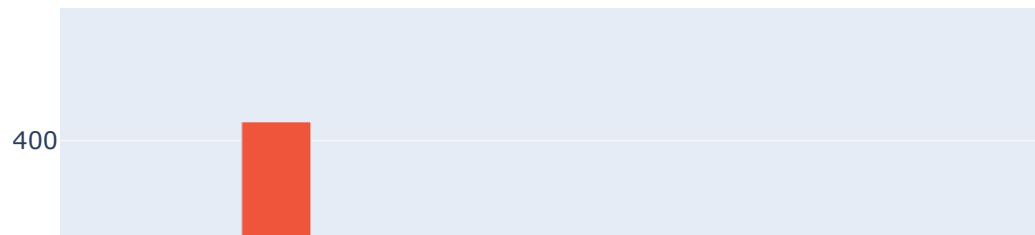
```
        title="Usage")  
figure.show()
```

Usage



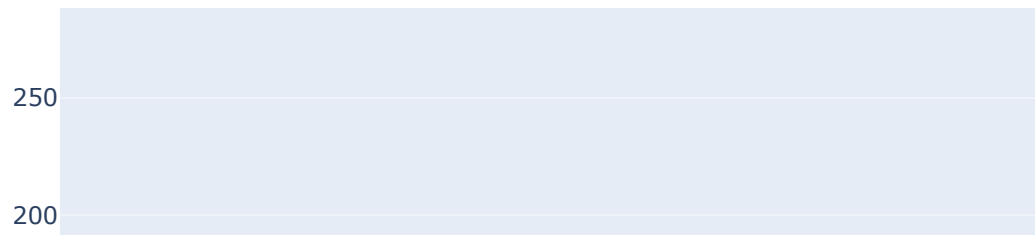
```
In [6]: #Let's have a look at the number of notifications from the apps:  
figure = px.bar(data_frame=data,  
                x = "Date",  
                y = "Notifications",  
                color="App",  
                title="Notifications")  
figure.show()
```

Notifications



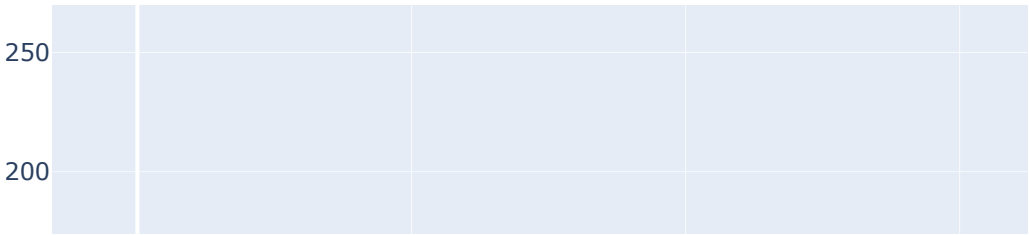
```
In [7]: #Let's have a look at the number of times the apps opened:
figure = px.bar(data_frame=data,
                 x = "Date",
                 y = "Times opened",
                 color="App",
                 title="Times Opened")
figure.show()
```

Times Opened



```
In [8]: #Let's have a look at the relationship between the number of notifications and t  
figure = px.scatter(data_frame = data,  
                    x="Notifications",  
                    y="Usage",  
                    size="Notifications",  
                    trendline="ols",  
                    title = "Relationship Between Number of Notifications and Us  
figure.show()
```

Relationship Between Number of Notifications and Usage



The linear relationship between the number of notifications and the amount of usage. It means that more notifications result in more use of smartphones.