

# Screen Time Analysis

**Jawaharlal Nehru Technological University Anantapur, Ananthapuramu**

in partial fulfillment of the requirements for  
the award of the degree of

## **BACHELOR OF TECHNOLOGY IN INFORMATION TECHNOLOGY**

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## Screen Time Analysis

**Screen time** is the amount of time spent using a device with a screen such as a smartphone, computer, television, or video game console. The concept is under significant research with related concepts in digital media use and mental health. Screen time is correlated with mental and physical harm in child development. The positive or negative health effects of screen time are influenced by levels and content of exposure.

## Data Set

This dataset contains the usage statistics of various apps on a phone.

Date	Usage	Notifications	Times opened	App
08/26/2022	38	70	49	Instagram
08/27/2022	39	43	48	Instagram
08/28/2022	64	231	55	Instagram
08/29/2022	14	35	23	Instagram
08/30/2022	3	19	5	Instagram
08/31/2022	19	25	20	Instagram
#####	44	23	57	Instagram
#####	16	28	22	Instagram
#####	27	15	25	Instagram
#####	72	29	30	Instagram
#####	42	24	51	Instagram
#####	19	34	25	Instagram
#####	38	23	19	Instagram
#####	71	48	43	Instagram
#####	43	68	70	Instagram
#####	45	71	70	Instagram
#####	94	180	95	Instagram
#####	114	99	102	Instagram
09/13/2022	17	45	39	Instagram
09/14/2022	1	10	2	Instagram
09/15/2022	2	15	4	Instagram
09/16/2022	3	13	5	Instagram
09/17/2022	2	9	3	Instagram
09/18/2022	3	8	5	Instagram
09/19/2022	4	8	3	Instagram
09/20/2022	5	11	5	Instagram
09/21/2022	2	12	8	Instagram
08/26/2022	82	209	105	Whatsapp
08/27/2022	69	111	68	Whatsapp
08/28/2022	130	183	86	Whatsapp

08/29/2022	59	157	74	Whatsapp
08/30/2022	128	246	87	Whatsapp
08/31/2022	108	169	77	Whatsapp
#####	23	99	47	Whatsapp
#####	76	144	103	Whatsapp
#####	1	80	16	Whatsapp
#####	6	38	33	Whatsapp
#####	126	218	121	Whatsapp
#####	91	205	110	Whatsapp
#####	160	212	83	Whatsapp
#####	69	217	82	Whatsapp
#####	119	405	192	Whatsapp
#####	103	166	79	Whatsapp
#####	203	173	92	Whatsapp
#####	182	290	172	Whatsapp
09/13/2022	71	153	91	Whatsapp
09/14/2022	64	192	67	Whatsapp
09/15/2022	50	181	58	Whatsapp
09/16/2022	71	176	91	Whatsapp
09/17/2022	212	212	120	Whatsapp
09/18/2022	244	303	132	Whatsapp
09/19/2022	77	169	105	Whatsapp
09/20/2022	58	190	78	Whatsapp
09/21/2022	89	262	68	Whatsapp
#####	44	23	57	Instagram
#####	16	28	22	Instagram
#####	27	15	25	Instagram
#####	72	29	30	Instagram
#####	42	24	51	Instagram
#####	19	34	25	Instagram
#####	38	23	19	Instagram
#####	71	48	43	Instagram
#####	43	68	70	Instagram
#####	45	71	70	Instagram
#####	94	180	95	Instagram
#####	114	99	102	Instagram
#####	44	23	57	Instagram
#####	16	28	22	Instagram
#####	27	15	25	Instagram
#####	72	29	30	Instagram
#####	42	24	51	Instagram
#####	19	34	25	Instagram
#####	38	23	19	Instagram
#####	71	48	43	Instagram
#####	43	68	70	Instagram
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09/19/2022	4	8	3	Instagram
09/20/2022	5	11	5	Instagram
09/21/2022	2	12	8	Instagram
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10/17/2022	2	9	3	Instagram
10/18/2022	3	8	5	Instagram
10/19/2022	4	8	3	Instagram
10/20/2022	5	11	5	Instagram
10/21/2022	2	12	8	Instagram

## Source Code

```
import pandas as pd
import numpy as np
import plotly.express as px
import plotly.graph_objects as go
data = pd.read_csv("ad.csv")
print("\n")
print("Screen Time Of App Analysis: " )
figure = px.bar(data_frame=data,
                x = "Date",
                y = "Usage",
                color="App",
                title="Usage")

figure.show()
print("Notifications Received From Apps Analysis:")
figure = px.bar(data_frame=data,
                x = "Date",
                y = "Notifications",
                color="App",
                title="Notifications")

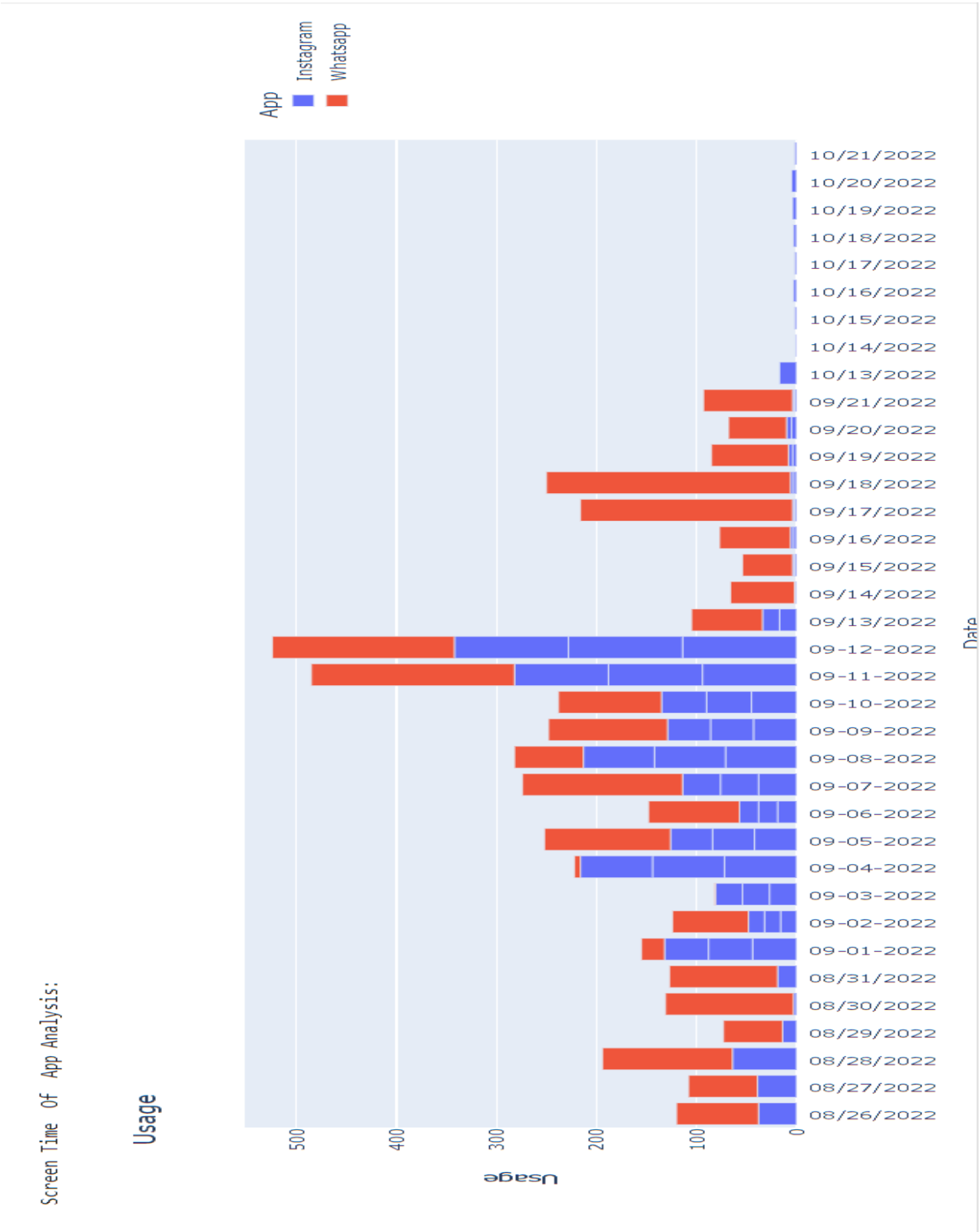
figure.show()
print("Number Of Times The App Unlocked/Opened")
figure = px.bar(data_frame=data,
                x = "Date",
                y = "Times opened",
                color="App",
                title="Times Opened")

figure.show()
print("Analysis Of Usage Of App And Incresing Screen Time Based On Not-
ifications")
figure = px.scatter(data_frame = data,
                    x="Notifications",
                    y="Usage",
                    size="Notifications",
                    trendline="ols",

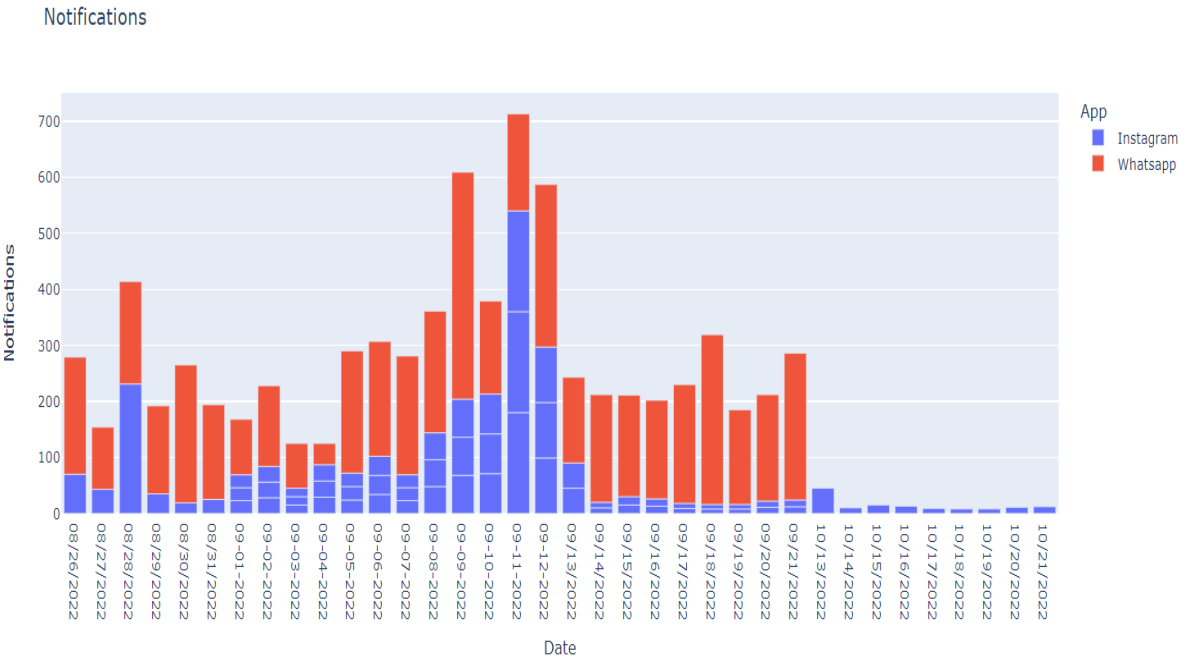
title = "Relationship Between Number of Notifications and Usage")
figure.show()
print("Analysis of Notifiaction Versus Usage")
figure = px.bar(data_frame=data,
                x = "Usage",
                y = "Notifications",
                color="App",
                title="Usage")

figure.show()
print("\n")
```

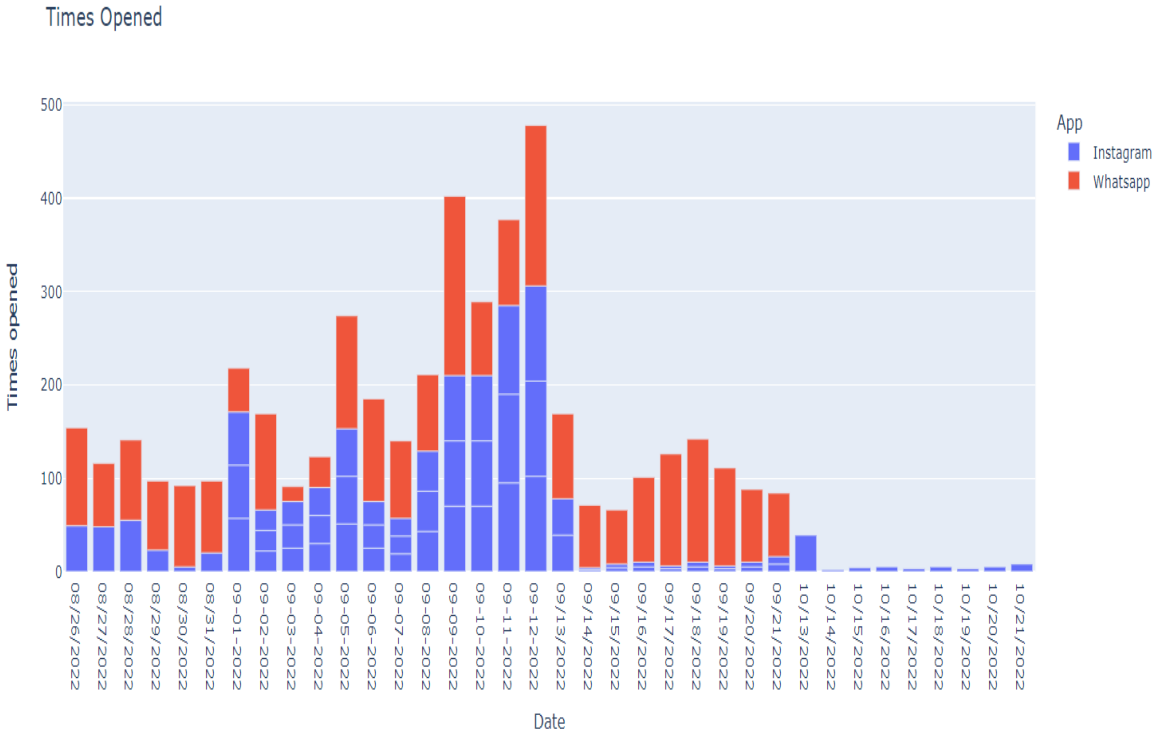
Output



Notifications Received From Apps Analysis:

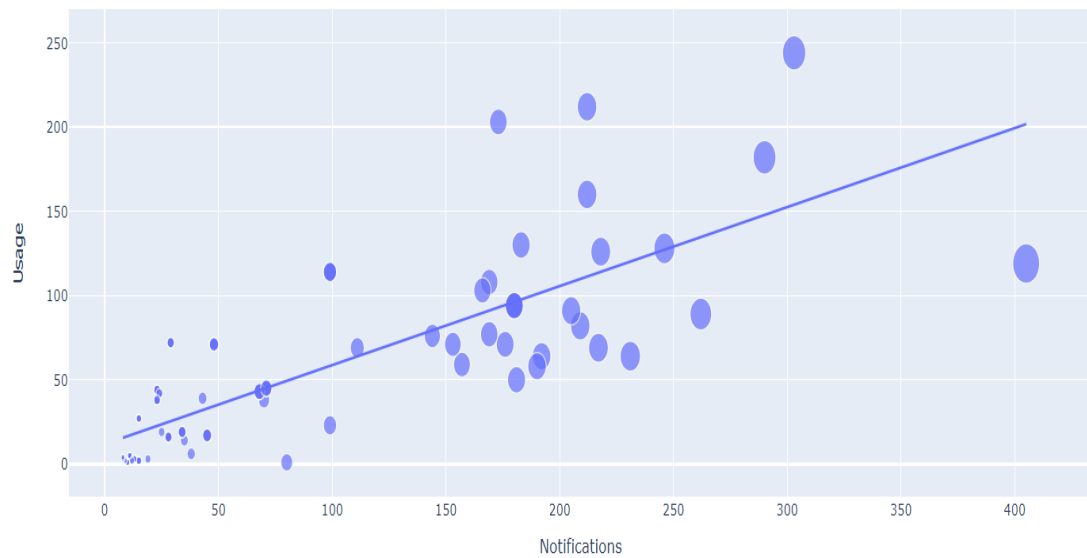


Number Of Times The App Unlocked/Opened





## Relationship Between Number of Notifications and Usage



## Usage

