

# **Title: - Screen Time Analysis Project**

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Semester: Third

## **Objective: -**

The objective of the Screen Time Analysis project is to provide users with an insightful and user-friendly dashboard that helps track and analyze their daily screen time across different devices and applications. The goal is to assist users in managing their screen usage, promoting a healthy balance between digital activities and offline engagements. By offering detailed reports and visualizations, the project aims to raise awareness about screen time habits and encourage more mindful usage.

## **Problem statement: -**

With the rise of digital devices and applications, people often find themselves spending significant amounts of time on screens, which can lead to health issues such as eye strain, disrupted sleep, and a sedentary lifestyle. However, many individuals are unaware of how much time they spend on various applications and devices. This lack of awareness makes

it difficult to adopt healthier digital habits and maintain a proper work-life balance.

## **Solution: -**

The solution to this problem is to build a **Screen Time Analysis** application that tracks and visualizes the time users spend on their devices, across different apps, and even provides insights into usage trends. The app will:

- **Track screen time:** Automatically monitor and log screen time for different devices (smartphones, laptops, tablets).
- **Categorize usage:** Break down screen time by application, categorizing them into work, social media, entertainment, etc.
- **Provide insights:** Offer detailed reports and analytics, such as daily, weekly, or monthly trends.
- **Set goals:** Allow users to set time limits for specific apps or total screen time per day.
- **Notifications and alerts:** Send reminders or warnings when users exceed their set limits.
- **Visualization:** Provide charts and graphs (using tools like Plotly or Matplotlib) to make the data easier to interpret.

## **Implementation: -**

```
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())
data.isnull().sum()
print(data.describe())
```

```
figure = px.bar(data_frame=data,
                 x = "Date",
                 y = "Usage",
                 color="App",
                 title="Usage")
figure.show()
```

```
figure = px.bar(data_frame=data,
                 x = "Date",
                 y = "Notifications",
                 color="App",
                 title="Notifications")
figure.show()
```

```
figure = px.scatter(data_frame = data,
                    x="Notifications",
                    y="Usage",
                    size="Notifications",
                    trendline="ols",
                    title = "Relationship Between Number of
Notifications and Usage")
figure.show()
```

Output: -



