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In [3]: import pandas as pd
import numpy as np
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In [4]: df=pd.read_csv('stc_dataset.csv')
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In [5]: df.head()
```

```
Out[5]:
```

	date_	Total_watch_time_in_houres
0	1/1/2018 0:00	1123.551944
1	1/2/2018 0:00	1000.129722
2	1/3/2018 0:00	881.924444
3	1/4/2018 0:00	782.669444
4	1/5/2018 0:00	1051.939444

```
In [6]: df.tail()
```

```
Out[6]:
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	date_	Total_watch_time_in_houres
81	4/24/2018 0:00	652.625278
82	4/25/2018 0:00	650.428889
83	4/26/2018 0:00	675.184444
84	4/27/2018 0:00	601.738056
85	4/30/2018 0:00	609.281667

```
In [7]: df.shape
```

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Out[7]: (86, 2)
```

```
In [8]: df.describe()
```

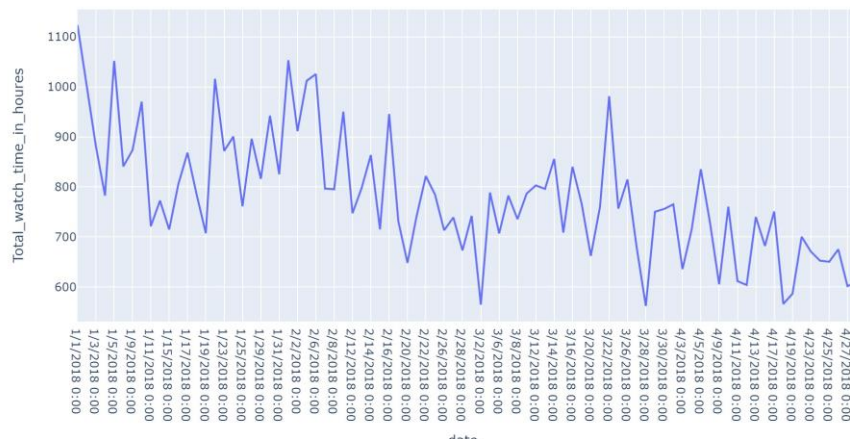
```
Out[8]:
```

	Total_watch_time_in_houres
count	86.000000
mean	780.817926
std	122.992002
min	562.124722
25%	707.709653
50%	763.181389
75%	840.985278
max	1123.551944

```
In [9]: df.isnull().any()
```

```
Out[9]: date_ False
Total_watch_time_in_houres False
dtype: bool
```

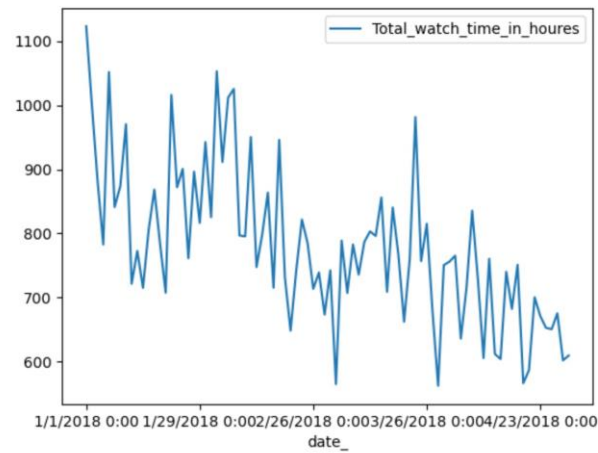
```
In [22]: import matplotlib.pyplot as plt # a comprehensive library for creating static, animated, and interactive visualizations
import plotly # a graphing library makes interactive, publication-quality graphs. Examples of how to make line plots,
import plotly.express as px
import plotly.graph_objects as go
from plotly.subplots import make_subplots
```



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In [19]: import statsmodels.api as sm
```

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In [20]: df.plot()
```

```
Out[20]: <Axes: xlabel='date_'>
```



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In [21]: timeseries = df['Total_watch_time_in_hours']
timeseries.rolling(12).mean().plot(label='12 Months Rolling Mean')
timeseries.rolling(12).std().plot(label='12 Months std Mean')
timeseries.plot()
plt.legend()
```

```
Out[21]: <matplotlib.legend.Legend at 0x1c9a96a9cd0>
```

