

```
In [1]: !pip install bs4
!pip install html5lib
!pip install lxml

Requirement already satisfied: bs4 in c:\users\merry\anaconda3\lib\site-packages (0.0.1)
Requirement already satisfied: beautifulsoup4 in c:\users\merry\anaconda3\lib\site-packages (from bs4) (4.11.1)
Requirement already satisfied: soupsieve>1.2 in c:\users\merry\anaconda3\lib\site-packages (from beautifulsoup4->bs4) (2.3.2.post1)
Requirement already satisfied: html5lib in c:\users\merry\anaconda3\lib\site-packages (1.1)
Requirement already satisfied: six>=1.9 in c:\users\merry\anaconda3\lib\site-packages (from html5lib) (1.16.0)
Requirement already satisfied: webencodings in c:\users\merry\anaconda3\lib\site-packages (from html5lib) (0.5.1)
Requirement already satisfied: lxml in c:\users\merry\anaconda3\lib\site-packages (4.9.2)

In [6]: from bs4 import BeautifulSoup
import pandas as pd
import requests

In [20]: import yfinance as yf
import plotly.graph_objects as go
from plotly.subplots import make_subplots

In [3]: def make_graph(stock_data, revenue_data, stock):
fig = make_subplots(rows=2, cols=1, shared_xaxes=True, subplot_titles=("Historical Share Price", "Historical Revenue"), vertical_spacing = .3)
stock_data_specific = stock_data[stock_data.Date <= '2021-06-14']
revenue_data_specific = revenue_data[revenue_data.Date <= '2021-04-30']
fig.add_trace(go.Scatter(x=pd.to_datetime(stock_data_specific.Date, infer_datetime_format=True), y=stock_data_specific.Close.astype("float"), name="S",
fig.add_trace(go.Scatter(x=pd.to_datetime(revenue_data_specific.Date, infer_datetime_format=True), y=revenue_data_specific.Revenue.astype("float"), name="R",
fig.update_xaxes(title_text="Date", row=1, col=1)
fig.update_xaxes(title_text="Date", row=2, col=1)
fig.update_yaxes(title_text="Price ($US)", row=1, col=1)
fig.update_yaxes(title_text="Revenue ($US Millions)", row=2, col=1)
fig.update_layout(showlegend=False,
height=900,
title=stock,
xaxis_rangeslider_visible=True)
fig.show()

In [4]: tsla=yf.Ticker("TSLA")
tesla_data=tsla.history(period="max")
tesla_data.reset_index(inplace=True)
tesla_data.head()
```

Out[4]:

	Date	Open	High	Low	Close	Volume	Dividends	Stock Splits
0	2010-06-29 00:00:00-04:00	1.266667	1.666667	1.169333	1.592667	281494500	0.0	0.0
1	2010-06-30 00:00:00-04:00	1.719333	2.028000	1.553333	1.588667	257806500	0.0	0.0
2	2010-07-01 00:00:00-04:00	1.666667	1.728000	1.351333	1.464000	123282000	0.0	0.0
3	2010-07-02 00:00:00-04:00	1.533333	1.540000	1.247333	1.280000	77097000	0.0	0.0
4	2010-07-06 00:00:00-04:00	1.333333	1.333333	1.055333	1.074000	103003500	0.0	0.0

```
In [7]: url="https://cf-courses-data.s3.us.cloud-object-storage.appdomain.cloud/IBMDeveloperSkillsNetwork-PY0220EN-SkillsNetwork/labs/project/revenue.htm"
html_data=requests.get(url).text
```

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In [8]: soup=BeautifulSoup(html_data)
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In [9]: tesla_revenue=pd.DataFrame(columns=["Date", "Revenue"])
```

```
In [ ]: tesla_revenue = pd.DataFrame(columns = ['Date', 'Revenue'])

for row in soup.find_all("tbody")[1].find_all("tr"):
    col = row.find_all("td")
    date = col[0].text
    revenue = col[1].text.replace("$", "").replace(",","")

    tesla_revenue = tesla_revenue.append({"Date": date, "Revenue": revenue}, ignore_index = True)
```

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In [11]: tesla_revenue.dropna(inplace=True)
tesla_revenue = tesla_revenue[tesla_revenue['Revenue'] != ""]
```

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In [12]: tesla_revenue.tail()
```

Out[12]:

	Date	Revenue
48	2010-09-30	31
49	2010-06-30	28
50	2010-03-31	21
52	2009-09-30	46
53	2009-06-30	27

```
In [13]: gme=yf.Ticker("GME")
gme_data=gme.history(period="max")
gme_data.reset_index(inplace=True)
gme_data.head()
```

Out[13]:

	Date	Open	High	Low	Close	Volume	Dividends	Stock Splits
0	2002-02-13 00:00:00-05:00	1.620129	1.693350	1.603296	1.691667	76216000	0.0	0.0
1	2002-02-14 00:00:00-05:00	1.712708	1.716074	1.670627	1.683251	11021600	0.0	0.0
2	2002-02-15 00:00:00-05:00	1.683250	1.687458	1.658002	1.674834	8389600	0.0	0.0
3	2002-02-19 00:00:00-05:00	1.666418	1.666418	1.578047	1.607504	7410400	0.0	0.0
4	2002-02-20 00:00:00-05:00	1.615920	1.662210	1.603296	1.662210	6892800	0.0	0.0

```
In [14]: html_data=requests.get("https://cf-courses-data.s3.us.cloud-object-storage.appdomain.cloud/IBMDeveloperSkillsNetwork-PY0220EN-SkillsNetwork/labs/project/sales.htm")
```

```
In [15]: soup=BeautifulSoup(html_data)
gme_revenue=pd.DataFrame(columns=["Date", "Revenue"])
```

```
In [ ]: for row in soup.find_all("tbody")[1].find_all("tr"):
col=row.find_all("td")
date=col[0].text
revenue=col[1].text.replace("$", "").replace(",","")
gme_revenue=gme_revenue.append({"Date":date,"Revenue":revenue},ignore_index=True)
```

```
In [17]: gme_revenue.tail()
```

Out[17]:

	Date	Revenue
57	2006-01-31	1667
58	2005-10-31	534
59	2005-07-31	416
60	2005-04-30	475
61	2005-01-31	709

```
In [18]: make_graph(tesla_data,tesla_revenue, "Tesla")
```



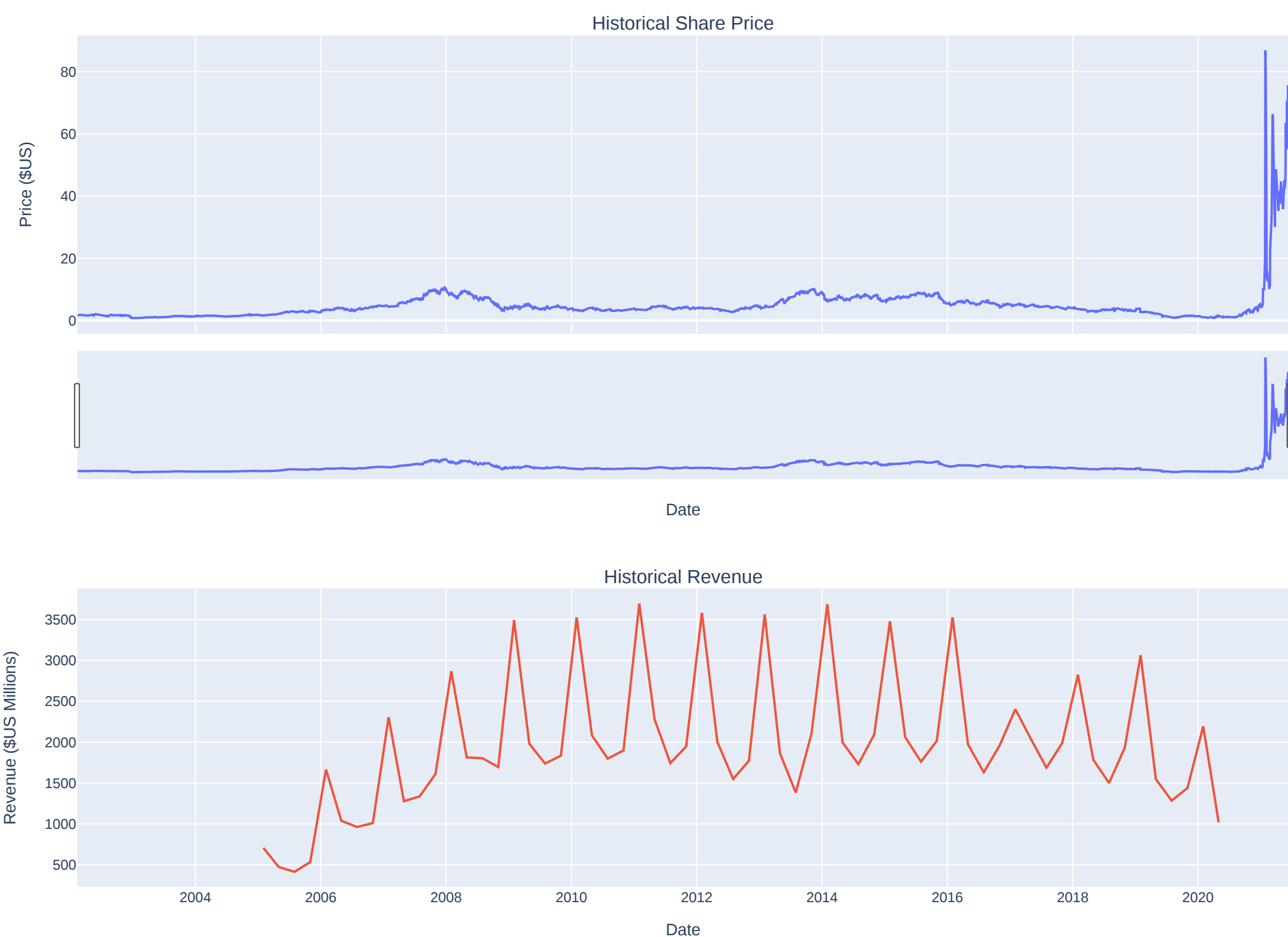
Tesla



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In [19]: make_graph(gme_data,gme_revenue, "Gamestop")
```



Gamestop



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In [ ]:
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