# STOCK SHARE GRAPH OF GAMESTOP AND TESLA

!pip install yfinance==0.1.70 !mamba install bs4==4.10.0 -y !pip install nbformat==4.2.0

#### import warnings

# Ignore all warnings
warnings.filterwarnings("ignore", category=FutureWarning)

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="Share Price"), row=1, col=1) 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="Revenue"), row=2, col=1) 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\_vaxes(title\_text="Revenue (\$US Millions)", row=2, col=1) fig.update layout(showlegend=False, height=900, title=stock, xaxis\_rangeslider\_visible=True) fig.show()

### **ANALYZE OF TESLA DATA**

tesla = yf.Ticker("TSLA") tesla\_data = tesla.history(period="max")

tesla\_data

Out[6]:		Open	High	Low	Close	Volume	Dividends	Stock Splits
	Date							
	2010-06-29	1.266667	1.666667	1.169333	1.592667	281494500	0	0.0
	2010-06-30	1.719333	2.028000	1.553333	1.588667	257806500	0	0.0
	2010-07-01	1.666667	1.728000	1.351333	1.464000	123282000	0	0.0
	2010-07-02	1.533333	1.540000	1.247333	1.280000	77097000	0	0.0
	2010-07-06	1.333333	1.333333	1.055333	1.074000	103003500	0	0.0
	2024-01-03	244.979996	245.679993	236.320007	238.449997	121082600	0	0.0
	2024-01-04	239.250000	242.699997	237.729996	237.929993	102629300	0	0.0
	2024-01-05	236.860001	240.119995	234.899994	237.490005	92379400	0	0.0
	2024-01-08	236.139999	241.250000	235.300003	240.449997	85166600	0	0.0
	2024-01-09	238.110001	238.964600	232.039993	234.960007	96409241	0	0.0

3406 rows × 7 columns

tesla\_data.reset\_index(inplace=True)

tesla\_data.head()

Out[7]:		Date	Open	High	Low	Close	Volume	Dividends	Stock Splits
	0	2010-06-29	1.266667	1.666667	1.169333	1.592667	281494500	0	0.0
	1	2010-06-30	1.719333	2.028000	1.553333	1.588667	257806500	0	0.0
	2	2010-07-01	1.666667	1.728000	1.351333	1.464000	123282000	0	0.0
	3	2010-07-02	1.533333	1.540000	1.247333	1.280000	77097000	0	0.0
	4	2010-07-06	1.333333	1.333333	1.055333	1.074000	103003500	0	0.0

url = "https://cf-courses-data.s3.us.cloud-objectstorage.appdomain.cloud/IBMDeveloperSkillsNetwork-PY0220EN-SkillsNetwork/labs/project/revenue.htm"

html\_data = requests.get(url)

html\_data

soup = BeautifulSoup(html\_data.text)

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)

tesla_revenue["Revenue"] = tesla_revenue['Revenue'].str.replace(',|\$',"")

tesla_revenue.dropna(inplace=True)

tesla_revenue = tesla_revenue[tesla_revenue['Revenue'] != ""]

tesla_revenue.tail()
```

Out[13]:		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

### **ANALYZE OF GAMESTOP DATA**

ticker2 = yf.Ticker("GME")
gme\_data = ticker2.history(period = "max")
gme\_data

Out[15]:		Open	High	Low	Close	Volume	Dividends	Stock Splits
	Date							
	2002-02-13	1.620129	1.693350	1.603296	1.691667	76216000	0.0	0.0
	2002-02-14	1.712707	1.716074	1.670626	1.683251	11021600	0.0	0.0
	2002-02-15	1.683250	1.687458	1.658002	1.674834	8389600	0.0	0.0
	2002-02-19	1.666418	1.666418	1.578047	1.607504	7410400	0.0	0.0
	2002-02-20	1.615920	1.662210	1.603296	1.662210	6892800	0.0	0.0
	2024-01-03	16.299999	16.830000	15.900000	16.690001	4193600	0.0	0.0
	2024-01-04	16.510000	16.750000	16.309999	16.360001	2671500	0.0	0.0
	2024-01-05	16.160000	16.520000	15.960000	15.960000	2615700	0.0	0.0
	2024-01-08	15.780000	16.120001	15.700000	15.790000	3031100	0.0	0.0
	2024-01-09	15.590000	15.615000	15.120100	15.160000	2859166	0.0	0.0
	5514 rows >	< 7 columns	3					

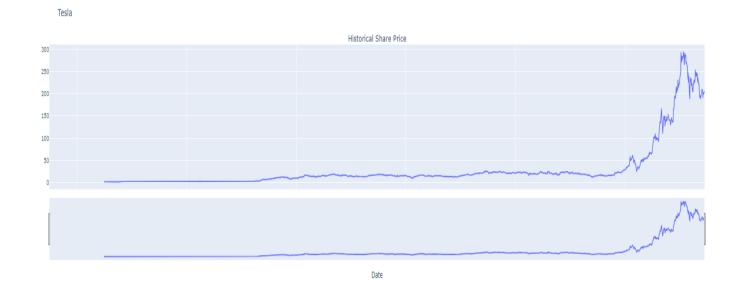
```
url = "https://cf-courses-data.s3.us.cloud-object-
storage.appdomain.cloud/IBMDeveloperSkillsNetwork-PY0220EN-
SkillsNetwork/labs/project/stock.html"
html_data = requests.get(url)
soup = BeautifulSoup(html_data.text)
gme_revenue = pd.DataFrame(columns = ['Date', 'Revenue'])

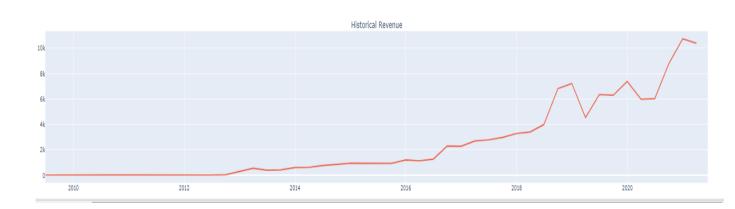
for row in soup.find_all("tbody")[1].find_all("tr"):
    col = row.find_all("td")
    date = col[0].text
    revenue = col[1].text.replace("$", "").replace(",", """)
```

## gme\_revenue = gme\_revenue.append({"Date": date, "Revenue": revenue}, ignore\_index = True) gme\_revenue.tail()

Out[20]:		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

make\_graph(tesla\_data, tesla\_revenue, "Tesla")





### make\_graph(gme\_data, gme\_revenue, 'GameStop')

