In [1]:
```
import yfinance as yf
import pandas as pd
import requests
from bs4 import BeautifulSoup
import plotly.graph_objects as go
from plotly.subplots import make_subplots
```

In [2]:
```
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)
    fig.add_trace(go.Scatter(x=pd.to_datetime(stock_data.Date, infer_datetime_format=True), y=stock_data.Close.astype("float"), name="Share Price"), row=1, col=1)
    fig.add_trace(go.Scatter(x=pd.to_datetime(revenue_data.Date, infer_datetime_format=True), y=revenue_data.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 ($US)", row=1, col=1)
    fig.update_yaxes(title_text="Revenue ($US Millions)", row=2, col=1)
    fig.update_layout(showlegend=False,
    height=900,
    title=stock,
    xaxis_rangeslider_visible=True)
    fig.show()
```

In [3]:
```
Tesla = yf.Ticker('TSLA')
```

In [4]:
```
tesla_data = Tesla.history(period = "max")
tesla_data.reset_index(inplace = True)
tesla_data.head()
print(tesla_data)
```

```
           Date        Open        High         Low       Close     Volume  \
0    2010-06-29    1.266667    1.666667    1.169333    1.592667  281494500
1    2010-06-30    1.719333    2.028000    1.553333    1.588667  257806500
2    2010-07-01    1.666667    1.728000    1.351333    1.464000  123282000
3    2010-07-02    1.533333    1.540000    1.247333    1.280000   77097000
4    2010-07-06    1.333333    1.333333    1.055333    1.074000  103003500
...         ...         ...         ...         ...         ...        ...
3063 2022-08-29  282.829987  287.739990  280.700012  284.820007   41864700
3064 2022-08-30  287.869995  288.480011  272.649994  277.700012   50541800
3065 2022-08-31  280.619995  281.250000  271.809998  275.609985   52107300
3066 2022-09-01  272.579987  277.579987  266.149994  277.160004   54287000
3067 2022-09-02  281.070007  282.350006  269.079987  270.209991   50752200

      Dividends  Stock Splits
0             0           0.0
1             0           0.0
2             0           0.0
3             0           0.0
4             0           0.0
...         ...           ...
3063          0           0.0
3064          0           0.0
3065          0           0.0
3066          0           0.0
3067          0           0.0

[3068 rows x 8 columns]
```

In [5]:
```
url = "https://www.macrotrends.net/stocks/charts/TSLA/tesla/revenue"
html_data = requests.get(url).text
```

In [6]:
```
soup = BeautifulSoup(html_data, "html.parser")
soup.find_all('title')
```

Out[6]:
```
[<title>Tesla Revenue 2010-2022 | TSLA | MacroTrends</title>]
```

In [7]:
```
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 [8]:

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

In [9]:

```
tesla_revenue.tail()
```

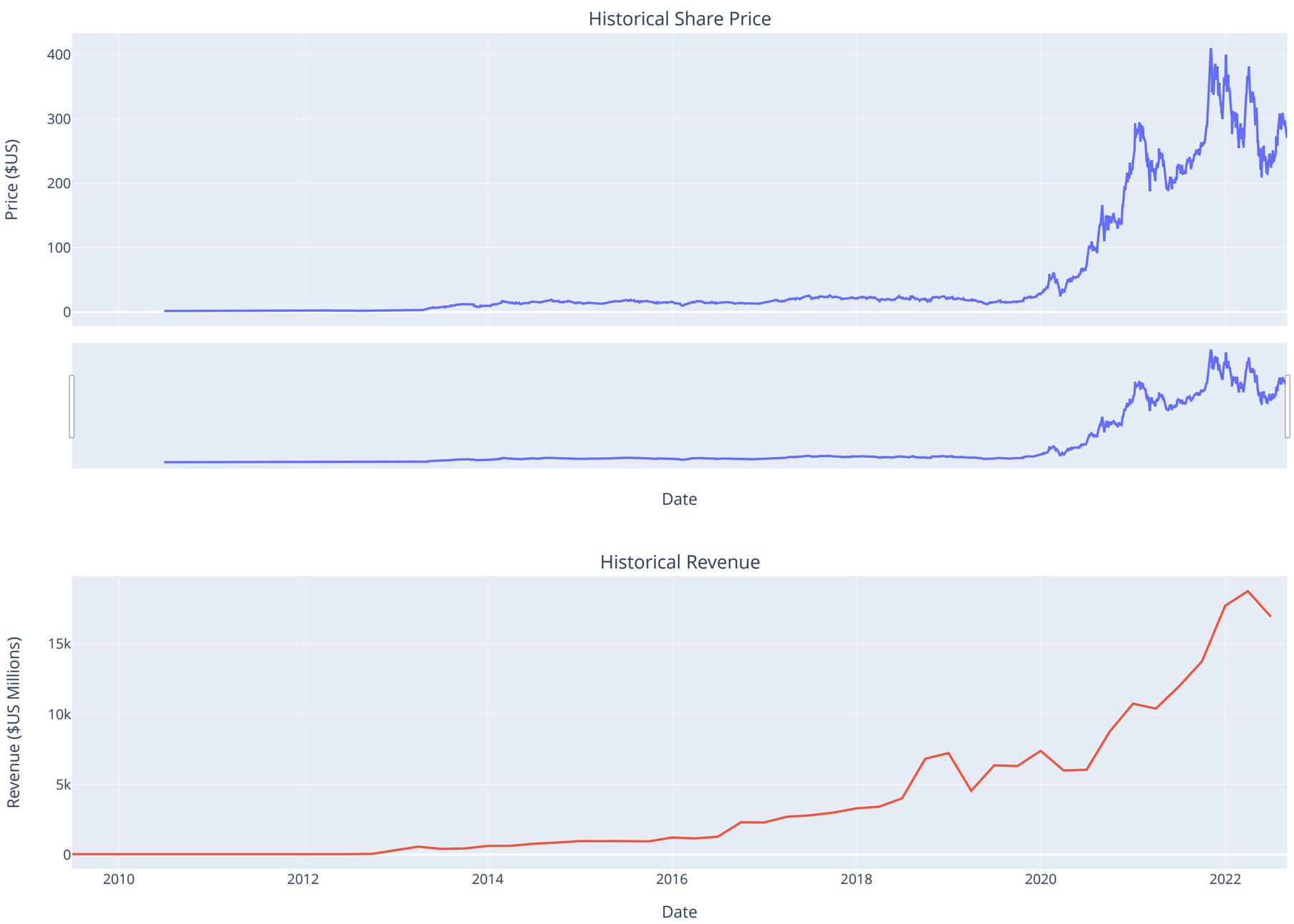
Out[9]:

	Date	Revenue
47	2010-09-30	31
48	2010-06-30	28
49	2010-03-31	21
51	2009-09-30	46
52	2009-06-30	27

In [10]:

```
make_graph(tesla_data, tesla_revenue, 'Tesla')
```

Tesla


Historical Share Price
Price ($US)
400
300
200
100
0
Date

Historical Revenue
Revenue ($US Millions)
15k
10k
5k
0
2010
2012
2014
2016
2018
2020
2022
Date

In [ ]: