

Twitter Stock Market Analysis using Python

Aim:

The aim of this project is to analyze the complete timeline of Twitter in the stock market from 2013 to 2022. By examining the stock price data of Twitter over the years, we aim to gain insights into its performance and identify trends and patterns.

Description of the Data:

The dataset used in this analysis contains stock price data of Twitter from 2013 to 2022. It includes columns such as Date, Open, High, Low, Close, Adj Close, and Volume. These columns represent the opening price, highest price, lowest price, closing price, adjusted closing price, and volume of shares traded on a particular day.

Analysis:

- **Data Preparation:** The initial step involved importing necessary Python libraries such as pandas, datetime, and Plotly for data manipulation and visualization. The dataset was then loaded and examined to understand its structure and contents.
- **Data Cleaning:** Null values were identified and removed from the dataset to ensure data integrity and accuracy. The Date column was converted from object type to datetime type for further analysis.
- **Visualization:** Various Plotly graphs such as Candlestick and Bar charts were created to visualize the stock prices of Twitter over the years. These visualizations provided insights into the overall performance and fluctuations in stock prices.
- **Timeline Analysis:** The timeline of Twitter in the stock market was analyzed by plotting a line chart showing the stock prices over the years. This allowed us to observe trends and patterns in Twitter's performance from 2013 to 2022.

Conclusion:

The analysis revealed several interesting insights into Twitter's performance in the stock market. Despite fluctuations and periods of volatility, Twitter experienced notable growth and reached its highest-ever stock price in 2021. However, it also faced challenges and declines in certain years, highlighting the dynamic nature of the stock market. Overall, this analysis provides valuable information for investors and stakeholders interested in understanding Twitter's journey in the stock market over the past decade.