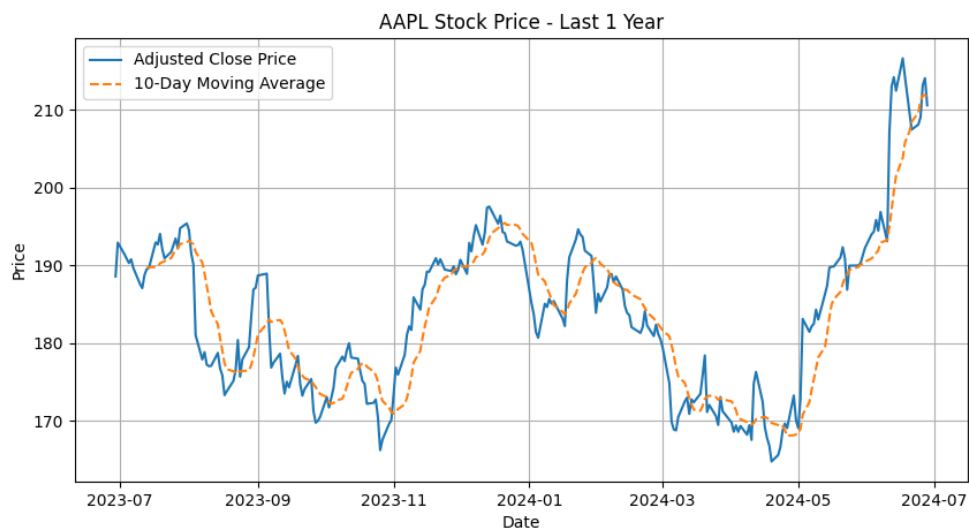


Investment Report for AAPL

Generated on 2024-07-01

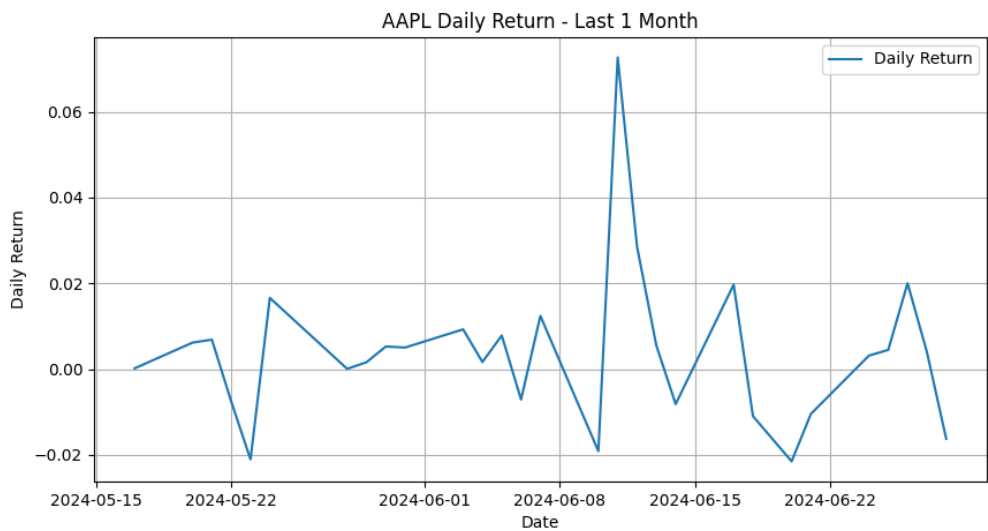
Stock Price Chart for AAPL



Stock Code	AAPL
Closing Price on	\$210.62
Annual Return	11.68%
Current Price	\$210.62
10-Day Moving Average	\$211.58
Trend	The stock is currently in a downtrend and is below the 10-day moving average.

Explanation:
The 10-day moving average (MA10) is the average closing price over the past 10 days. It helps to smooth out price data and identify trends. If the current price is above the MA10, it indicates an uptrend. If it's below, it indicates a downtrend.

Market Analysis for AAPL



Daily Return Explanation:
The daily return is calculated as the percentage change in the stock's closing price from one day to the next. It helps investors understand the stock's short-term performance and volatility.

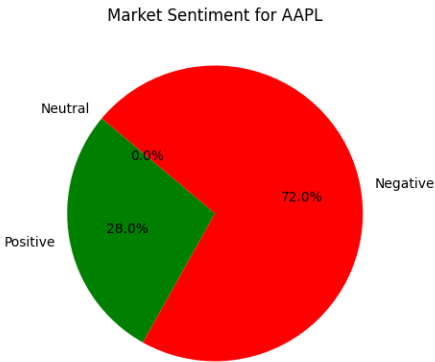
The formula for daily return is:
Daily Return = (Closing Price on Current Day - Closing Price on Previous Day) / Closing Price on Previous Day

Below are some example daily returns for the last 5 days:

Date	Daily Return
2024-06-24	0.31%
2024-06-25	0.45%
2024-06-26	2.00%
2024-06-27	0.40%
2024-06-28	-1.63%

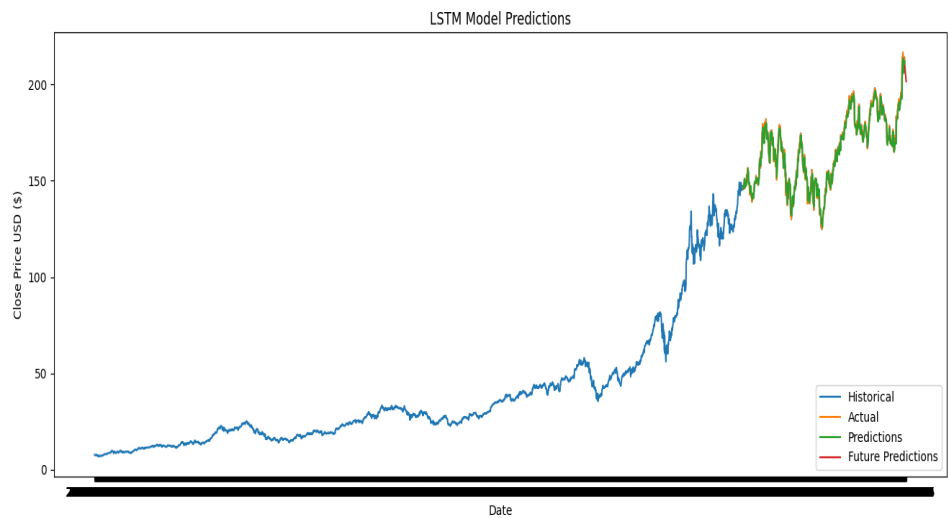
Volatility: The standard deviation of daily returns over the past month is an indicator of the stock's volatility.

Volatility (Last 30 Days)	1.81%
Average Daily Return (Last 30 Days)	0.37%



Sentiment Analysis Explanation:
Based on recent Reddit posts mentioning AAPL, the market sentiment is as follows: Positive: 28.00%, Negative: 72.00%

LSTM Prediction Analysis for AAPL



LSTM Prediction Results:
The chart below shows the LSTM model's predictions for the stock prices over the last 20 days and the next 7 days.

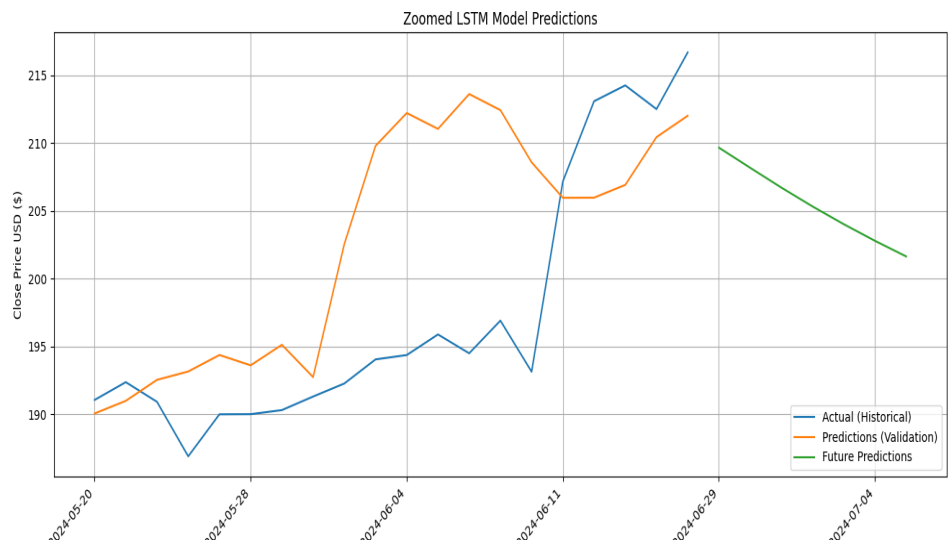
Understanding LSTM Predictions:
LSTM (Long Short-Term Memory) networks are a type of recurrent neural network capable of learning order dependence in sequence prediction problems. The chart above shows the LSTM model's ability to predict stock prices based on historical data.

Mean Squared Error (MSE): The MSE is a measure of the average squared difference between the predicted and actual values. It indicates how close the predicted prices are to the actual prices.

MSE: 8.6425

Date	Actual	Predicted
2024-06-20	209.67999267578125	212.41465759277344
2024-06-21	207.49000549316406	208.56480407714844
2024-06-24	208.13999938964844	205.9488983154297
2024-06-25	209.07000732421875	205.95840454101562
2024-06-26	213.25	206.89996337890625
2024-06-27	214.10000610351562	210.4227294921875
2024-06-28	210.6199951171875	211.99969482421875

Detailed LSTM Predictions



Insights and Future Predictions:

Based on the provided data, here is the investment recommendation for AAPL:

AAPL has been experiencing a downtrend, with the current price below the 10-day moving average. The volatility over the last 30 days has been relatively low at 1.81%, indicating a stable market environment. The average daily return over the same period has been positive at 0.37%.

Looking at the recent returns, AAPL has shown mixed performance. While there have been some positive returns, the last five days have seen a significant decline of -1.63%. This suggests a certain level of uncertainty in the short term.

Considering the sentiment analysis, there is a higher negative sentiment of 72% compared to the positive sentiment of 28%. This indicates a cautious market sentiment towards AAPL.

Furthermore, the LSTM prediction for the next seven days suggests a further decline in the stock price, with decreasing values each day.

Based on this analysis, it is recommended to exercise caution when considering an investment in AAPL. The recent downtrend, mixed performance, and negative sentiment indicate potential risks. It would be prudent to closely monitor the market and wait for more favorable conditions before making any investment decisions.