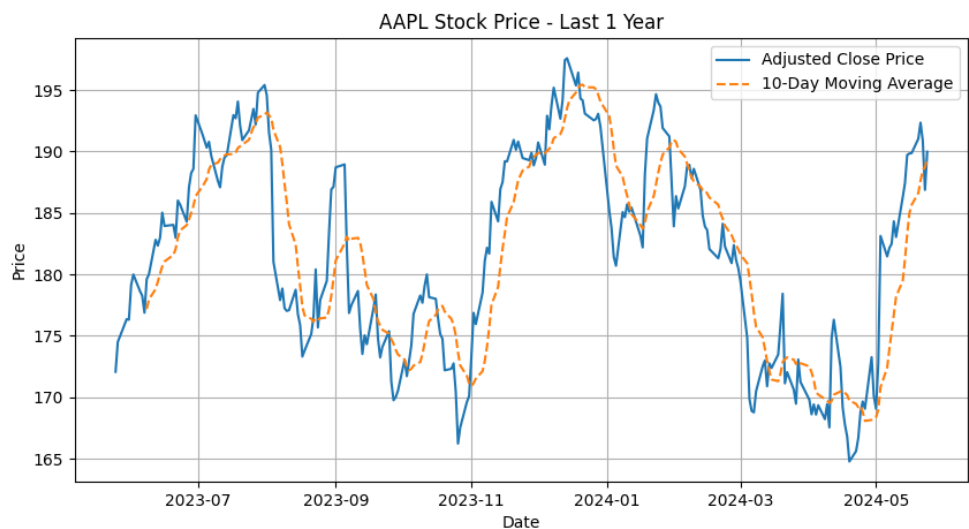


Investment Report for AAPL

Generated on 2024-05-28

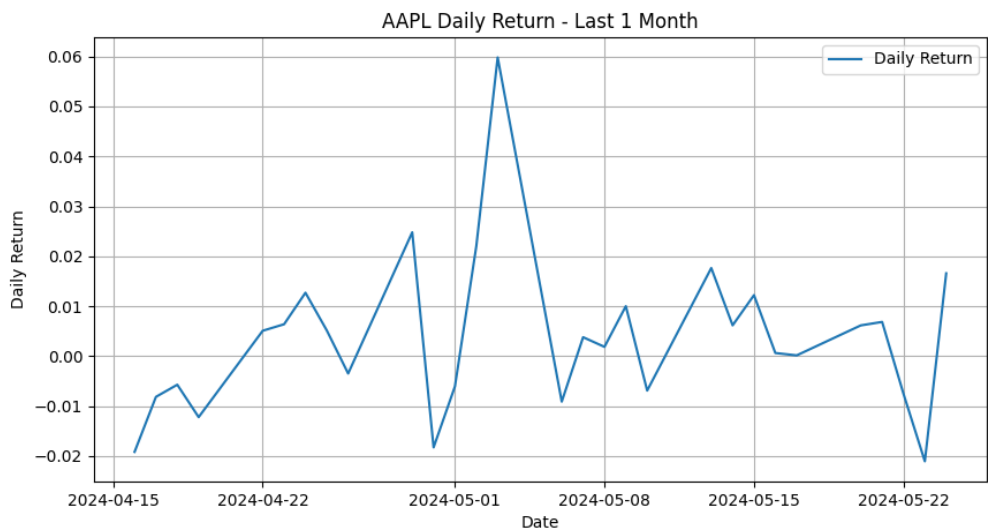
Stock Price Chart for AAPL



Stock Code	AAPL
Closing Price on	\$189.98
Annual Return	10.40%
Current Price	\$189.98
10-Day Moving Average	\$189.43
Trend	The stock is currently in an uptrend and is above 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:

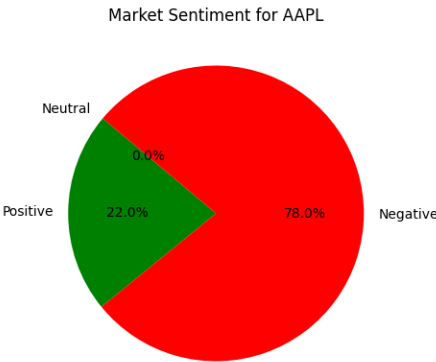
Daily Return = (Closing Price on Current Day - Closing Price on Previous Day) / Closing Price on Previous Day

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

Date	Daily Return
2024-05-20	0.62%
2024-05-21	0.69%
2024-05-22	-0.75%
2024-05-23	-2.11%
2024-05-24	1.66%

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

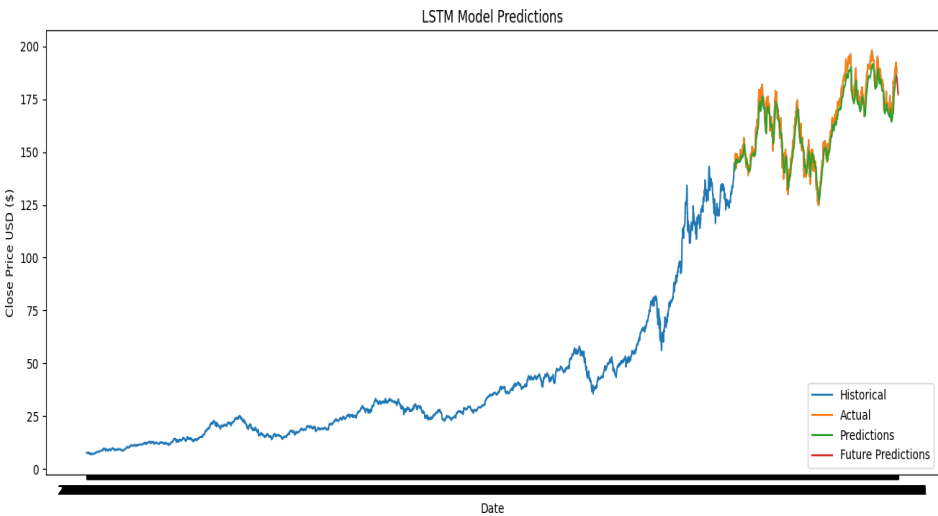
Volatility (Last 30 Days)	1.60%
Average Daily Return (Last 30 Days)	0.35%



Sentiment Analysis Explanation:

Based on recent Reddit posts mentioning AAPL, the market sentiment is as follows: Positive: 22.00%, Negative: 78.00%

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.

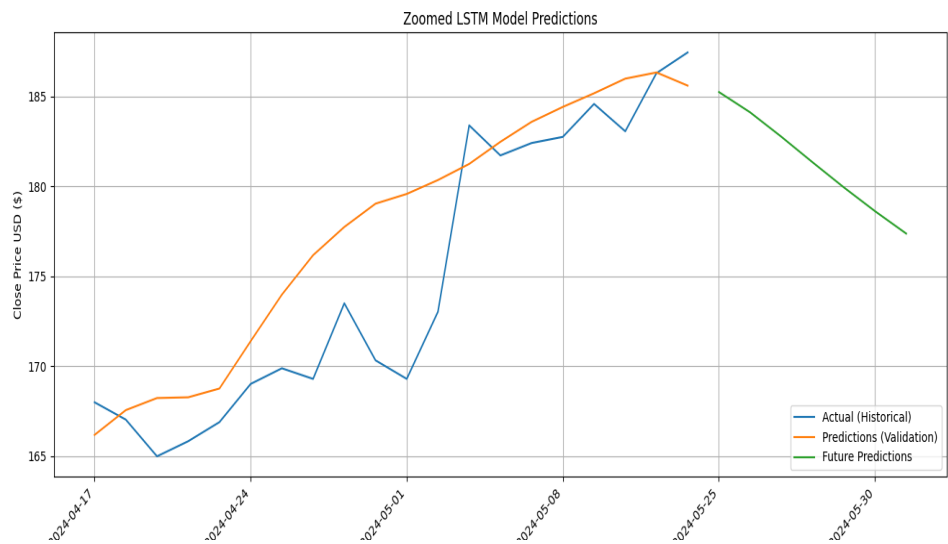
Understanding LSTM Predictions:
LSTM (Long Short-Term Memory) networks are a type of recurrent neural network capable of learning order dependence in sequence prediction problems. The chart above shows the LSTM model's ability to predict stock prices based on historical data.

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: 20.7815

Date	Actual	Predicted
2024-05-16	189.83999633789062	182.4659881591797
2024-05-17	189.8699951171875	183.5760040283203
2024-05-20	191.0399932861328	184.403564453125
2024-05-21	192.35000610351562	185.16175842285156
2024-05-22	190.89999389648438	185.97328186035156
2024-05-23	186.8800048828125	186.3180694580078
2024-05-24	189.97999572753906	185.58602905273438

Detailed LSTM Predictions



Insights and Future Predictions:

Based on the provided data, AAPL (Apple Inc.) appears to be a favorable investment opportunity. With a current closing price of \$189.98 and an annual return of 10.40%, the stock demonstrates healthy growth potential. The upward trend and position above the 10-day moving average further support a positive outlook.

The stock's volatility over the last 30 days has been relatively low at 1.60%, while the average daily return during this period has been a promising 0.35%. Although there have been fluctuations in the last 5 days, the overall sentiment remains mostly negative, which might indicate a potential buying opportunity.

The LSTM prediction for the next 7 days suggests a slight decrease in the stock price, indicating a possible short-term dip. However, this can be viewed as a potential entry point for investors looking to accumulate AAPL at a more favorable valuation.

Considering the overall positive performance indicators and the long-term growth prospects of Apple Inc., it is recommended to initiate or add to a position in AAPL. This recommendation is based on the stock's growth potential, low volatility, and the opportunity presented by the negative sentiment. Investors should conduct further research and monitor market developments to make informed decisions before investing.