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Final Project Summary

For the final project, I decided to create a stock analysis application which would be utilized by investors, experienced or inexperienced, to examine four, Fortune 500 growth stock companies. These companies included: Apple, Amazon, Tesla, and Meta. This project was programmed on Jupyter Notebooks utilizing the Python language. Specific packages necessary for this project include: pandas and matplotlib. Resources such as ChatGPT and Yahoo Finance were referenced. ChatGPT was used to make programming outputs more visually appealing and the use of unique matplotlib features. Yahoo Finance was referenced to compare and ensure the accuracy of the outputs. Using these platforms, my project conducted an analysis based around the following questions: which company had the highest and lowest percent change overall, what was the average stock price for all of the companies, which company holds the highest and lowest volume all time, which date did each company have their highest stock price per share, and which company had the highest change in stock value held in a singular day. Through this analysis, it was possible to understand that Tesla had substantial but volatile growth, Apple had steady and relevant growth, Meta was newer (low volume) and volatile, and Amazon had stable growth but diminishing relevance. The analysis highlights safer options like Apple and Amazon for steady growth versus riskier but potentially higher-return options like Tesla and Meta. This user-friendly approach offers valuable insights for both seasoned investors tracking Fortune 500 stocks and newcomer investors, showcasing the potential of coding in stock market analysis. If continued, I think it would be beneficial to incorporate more Fortune 500 companies so that there are more stocks and data to compare. This would give users more options for investment and would provide a better, larger scope of the stock market since 2008.