

Stock Visualization App – Use Case Descriptions

UC-01: Configure API Key

- User makes sure the app has the Alpha Vantage API key so it can pull stock data.

UC-02: Enter Stock Symbol

- User types in the stock ticker they want (ex: AAPL, TSLA, MSFT).

UC-03: Select Time Series

- User chooses whether they want daily, weekly, or monthly stock data.

UC-04: Select Chart Type

- User picks chart style (line chart, candlestick, etc.).

UC-05: Enter Date Range

- User gives start + end dates to control the time period they want to see.

UC-06: Validate Inputs

- App checks that dates are valid and end date isn't before start date.

UC-07: Request Stock Data

- App sends the request to Alpha Vantage using the inputs the user gave.

UC-08: Filter & Prep Data

- App cleans the data and filters it so only the selected date range shows up.

UC-09: Generate Chart

- App builds the chart based on the user's selection.

UC-10: Show Chart

- App opens the chart in the user's default browser so they can see it.

UC-11: View Help

- User can pull up simple help info if needed.

UC-12: Exit App

- User closes the program. Nothing complicated.

Overall: user picks a stock, picks how they want it shown, and the app makes it happen

without breaking or confusing people.