# Real-Time Stock Price Tracker & Dashboard

## Technology / Tools

1. **Programming Language:** Python 3
2. **Libraries Used:** 2.1. **yfinance** → Fetch live stock data from Yahoo Finance 2.2. **pandas** → Data manipulation and processing 2.3. **matplotlib** → Plot stock price charts 2.4. **streamlit** → Build the interactive dashboard
3. **IDE:** VS Code / PyCharm / Jupyter Notebook
4. **Output:** Web dashboard, interactive charts, CSV files

## How to Use / Instructions

### Step 1: Install Required Libraries

1. Open your terminal or command prompt.
2. Run the following command:

pip install yfinance pandas matplotlib streamlit

### Step 2: Configure Stock Symbols and Alerts

1. Open stock\_tracker.py in your IDE.
2. Set the stocks you want to track:

STOCKS = ["AAPL", "TSLA", "GOOG"]

1. Optionally, set alert thresholds:

ALERTS = {  
 "AAPL": 180,  
 "TSLA": 700,  
 "GOOG": 1400  
}

### Step 3: Run Dashboard

1. Execute the following command:

streamlit run stock\_tracker.py

1. A browser window will open displaying the dashboard.
2. Use the sidebar to select the stocks you want to track.

### Step 4: Monitor Real-Time Data

1. Prices update automatically every UPDATE\_INTERVAL seconds.
2. Charts display live trends for each selected stock.
3. Alerts will appear if a stock crosses its defined threshold.

### Step 5: Export Data (Optional)

1. Export historical stock prices to a CSV file:

df.to\_csv("stock\_data.csv", index=False)

1. Analyze stock trends using Excel or other tools.

**Outcome:** After following these steps, you will have a live, interactive stock dashboard showing: 1. Current stock prices. 2. Price trends. 3. Alerts for selected stocks.