



**COLLEGE CODE :9530**

**COLLEGE NAME :St.Mother Theresa Engineering College**

**NM-ID ROLL NO :**

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**Completed the project named as Phase 3**

**PROJECT NAME : Real time stock ticker**

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# Real-Time Stock Ticker – Phase 3

## Objective:

Enhance the stock ticker system by adding more robust features, optimized performance, and user interaction capabilities compared to earlier phases.

## Key Features in Phase 3

- **Live Price Updates:** Stock data fetched in real-time using APIs (e.g., Yahoo Finance, Alpha Vantage, NSE/BSE APIs). Automatic refresh without reloading the page (WebSocket or AJAX polling).
- **Multi-Stock Support:** Track multiple tickers simultaneously. Customizable watchlist for users.
- **Data Visualization:** Real-time line/area charts showing intraday price movements.
- **Indicators** like % change, volume, day high/low.
- **User Interaction:** Search bar for looking up tickers. Add/remove stocks to personal watchlist. Highlight top gainers/losers in the list.
- **Performance Optimization:** Caching frequently requested stock data. Using lightweight UI frameworks (React, Vue, or Vanilla JS).

## System Flow (Phase 3)

- **Client-Side (Frontend):** Displays live stock ticker, charts, and watchlist. Communicates with backend via WebSocket for instant updates.
- **Server-Side (Backend):** Fetches live stock data from financial APIs. Pushes updates to frontend in real time.
- **Database:** Stores user preferences, watchlist, and recent history.

## Sample UI Mockup

**TickerBar:** [AAPL:\$175.23 ▲ +1.4%] [TSLA: \$250.10 ▼ -0.7%] [INFY: ■1,650 ▲ +0.9%]

### Dashboard:

- Search box
- Live stock list with price & % change
- Chart window for selected stock

[Link:https://github.com/harishug23cs-eng/SMTEC-NM-NBM-REAL-TIME-STOCK-TIKER.git](https://github.com/harishug23cs-eng/SMTEC-NM-NBM-REAL-TIME-STOCK-TIKER.git)