

Company Chart Dashboard - Documentation

Objective:

To build a responsive web application that displays stock trend charts for companies based on CSV data.

1. Data Handling:

- The application loads a CSV file (dump.csv) containing data in the format: Company, Date, Value.
- A custom JavaScript function `parseCSV()` reads the CSV file and organizes the data into a JavaScript object with keys as company names and arrays of labels (dates) and values (stock prices).

2. Frontend UI:

- HTML and Bootstrap are used to create a responsive layout with two sections:
 - A sidebar listing all company names.
 - A main panel for displaying the chart and company title.
- Each company item is clickable, triggering the chart rendering function.

3. Chart Rendering:

- Chart.js is used to render line charts dynamically.
- When a company is selected, its corresponding data is passed to Chart.js, which generates a line chart with proper axis labels and tooltips.

4. Error Handling:

- If the CSV fails to load (e.g., due to running outside a server environment), a clear error message is shown with a console error for developers.

Creativity & Additional Features

- Clean, Minimal UI: Utilized Bootstrap for a visually clean and responsive layout.
- Dynamic Chart Loading: Charts are rendered dynamically without page reload using Chart.js.
- Interactive Sidebar: Hover effect and click event for company selection enhance UX.
- Real-time Data Parsing: The application reads and parses CSV in the browser without needing backend scripting.
- Error Handling: Graceful fallback in case of CSV load failure (with friendly message).
- Responsive Design: Works on mobile and desktop devices with fluid layout.

Note: This application is fully client-side and can be hosted on GitHub Pages or run via Live Server.