Documentation for SeedVest Application(PHP, JS,CSS)

**backend.php**

Overview

Handles backend functionalities including user authentication, session management, error handling, and database interactions.

Detailed Breakdown

Session Management

Manages user sessions securely.

Authentication

Handles login and registration securely, validating user inputs.

Database Interactions

Executes queries for user data retrieval and storage.

Error Handling

Captures and displays relevant user feedback during errors.

Functional Highlights

- Secure login and registration

- User-friendly error messaging

- Efficient database queries

User Interaction and Impact

- Securing user accounts and sessions

- Improving user trust through robust error handling

**styles.css**

Overview

Defines the styling for the SeedVest web application, covering themes, dark mode, typography, layout structures, interactive elements, responsive design, and various UI components.

Detailed Breakdown

CSS Variables

Defines reusable color and style variables for consistent design.

Utility Classes

Reusable classes for color indicators, status messages, and basic formatting.

Dark Mode Implementation

Adjusts colors dynamically based on user-selected themes.

Responsive Design

Media queries ensure layouts adapt to different screen sizes.

Component Styling

Detailed styles for buttons, forms, stock items, news, and portfolio elements.

Functional Highlights

- Consistent theming and responsive layouts

- Clear visual indicators for errors and successes

- Interactive elements with smooth transitions

User Interaction and Impact

- Enhanced user experience through visually appealing and intuitive design

- Accessibility improvements through clear visual cues

**main.js**

Overview

Contains JavaScript code responsible for dynamic data fetching from APIs, event handling, DOM manipulations, interactive charts, and real-time user interactions.

Detailed Breakdown

Data Fetching

Retrieves real-time data from external stock market APIs.

Event Handling

Responds to user interactions like button clicks, form submissions, and dropdown changes.

Interactive Charts

Renders dynamic stock charts using Chart.js for visual data analysis.

UI Updates

Dynamically updates HTML elements based on API data and user interactions.

Functional Highlights

- Real-time data handling

- Efficient event-driven architecture

- Dynamic user interface management

User Interaction and Impact

- Immediate feedback on user actions

- Interactive data visualization enhancing user engagement