**Case Study: Stock Portfolio Management System**

**Objective:**

Develop a menu-based console application to assess your proficiency in Core Java, MySQL, and JDBC. The application will simulate a stock portfolio management system, allowing users to track their investments, view stock details, and analyze portfolio performance.

**Functionalities:**

1. **Portfolio Management:**
   * Add new stocks to the portfolio
   * View portfolio details
   * Update stock information
   * Delete stocks from the portfolio
2. **Stock Information:**
   * Retrieve and display real-time stock prices
   * View historical stock data
   * Update stock information (e.g., stock name, price)
3. **Portfolio Analysis:**
   * Calculate portfolio value based on current stock prices
   * Analyze portfolio performance (e.g., ROI, gains/losses)
   * View graphical representation of portfolio performance

**Database Schema:**

* **Stock Table:**
  + stock\_id (Primary Key)
  + stock\_name
  + current\_price
  + high\_price
  + low\_price
* **Portfolio Table:**
  + portfolio\_id (Primary Key)
  + stock\_id (Foreign Key references Stock Table)
  + quantity
  + purchase\_price
  + purchase\_date

**Requirements:**

* Develop a menu-based console application using Core Java.
* Use JDBC for interactions with the MySQL database.
* Implement menu options for managing stock portfolios, retrieving stock information, and analyzing portfolio performance.
* Ensure that the application provides real-time stock prices, historical data, and performance analysis.
* Handle exceptions effectively and provide user-friendly error messages.
* Ensure the application code is clean, well-documented, and follows standard coding conventions.

**Submission:**

* Submit the complete source code along with a README file that provides setup and usage instructions.
* Share your project by uploading it to a public GitHub repository.
* Provide the link to the GitHub repository to the coaches.