Monitor Stock Price

Project Description

Implement a small system to monitor stock price for a list of companies. You can read the stock information from any service provider of your choice. (Ex: Yahoo or NASDAQ etc).

The system should contain 3 parts:

- A MySQL database which stores all necessary data,
- A standalone java program which fetches stock quote from Yahoo Finance (or wherever else you choose) and inserts the data into the MySQL database, and
- A web application which provides a RESTful API. The API should allow user to perform all CRUD operations on companies and query stock price history. (It's a plus if you can implement a UI besides the RESTful API)

Overview

The web application should support the following API features:

Add Company:

User should be able to create a new company. As soon as a new company is created you should start reading its current stock price

Delete Company:

User should be able to delete an existing company

List Companies:

User should be able to see list of all the companies that exist in his database. The list page should be capable to show the latest stock price of all the companies

Company History:

User should be able to see historical performance of any stock available in his database. You can use some graphs to show stock performance

How do we evaluate your performance?

Please pay attention to the following notes. These are minimal requirements. Failure to meet any of them will result in immediate disqualification.

- Can you finish the project in a timely manner?
- Can you clearly describe your design and implementation (you can create word documents, slides, or whatever format you like)?
    - The document should clearly and accurately describe the system you actually implemented. Some applicants describes a very advanced system on paper but the implementation is very rudimentary. Please don't do that. Please only describe what you implemented.
    - Documentation should include a section that describes how to execute your project
- Pay attention to what design pattern you choose and support the choice you made
- The project should be easy to build, run and test

Expected Project Delivery

- Please email us a compressed folder of your entire project and a document that describes your design
    - If you have the project hosted on a website like Github or Bitbucket, just send us the link in the email

Tips

- Use a tool to control the source code version
- UT tests should be run automatically after building
- The continuous integration should work smoothly; this includes compiling, packaging, testing and deployment

- Please apply the best practices mandated by continuous integration.