

The Scenario:

Advisor/Client - Mr. xx - Financial Entrepreneur

The client, xx, makes decisions based on the performance of a stock, to determine how a stock will perform in the future, and decide, based on the comparative advantages between two stocks, find the best thing to invest in. To do this he takes into account the statistics from the last 10 years about a given stock and then analyzes this. This way he is able to find what the best thing to do in each scenario is.

However, currently, xx must perform these calculations each time that he wishes to analyze another stock. It is also cumbersome for him to perform these calculations multiple times for each stock every time he wants to compare two options. Furthermore, xx has no way to verify if his values are accurate, as every time he performs the calculations there is a chance that he may make an error while calculating. Xx feels that this is hindering his ability to accurately and efficiently carry out his work.

Thus xx has come to me to ask if I could design a computer application to help perform the calculations for him, as well as store these results in a database so that he can compare two stocks easily. To achieve these ends, I will create a java application that implements SQL to streamline this process for him.

The rationale for the proposed solution:

For this application, I decided to use java. I decided that this would be optimal, as I can use the swing library for GUI to make it intuitive for use. Furthermore, I can make use of the derby database and the ability of java to use SQL to be able to store the data into a database. The major strength of java, however, will be the fact that I can use object-oriented programming with it.

My client can take advantage of this due to how they can navigate through the GUI. Furthermore, my client can utilize the SQL database aspect of the application for permanent memory storage. The client will also be able to provide the information on each stock, and then they will get the returned information of each individual stock. Along with this, the client will be able to manage information in the database. This means that the client can update and delete information in the database as well as insert new information. This is relevant as the information for stocks change rapidly over time, and my client stressed the need to be able to cover all of the relevant information.

Success Criteria:

- To be able to evaluate the performance of a stock based on input parameters
- Store the results in a database
- Recall results from the database
- Compare different stocks to determine the best one

- Evaluate future performance of stocks
- Feature to overwrite previous data
- Rate different aspects of a stock
- Allow the user to change values in the database

