Project Summary

Team Name: FatCAT
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Product Name: SimulaFin

Our product SimulaFin aims to provide an intuitive and easy access to create and evaluate stock portfolios for inexperienced investors. By using SimulaFin, users can create, update or delete stock portfolios, as well as look up detailed statistics and historical data for a certain stock or a stock industry.

Specifically, SimulaFin implements a MySQL database which contains statistics and historical prices of 100 stocks from 10 different industries, as well as several knowledge centers for users to exchange ideas and experience by posting new topics and comments. Based on the data on stocks, we implement some web pages which enable us to manage users and their portfolios. On top of that, we have used CloverETL to combine data on historical unemployment rates with our stock data, in order to find the relationship between the performance of stock market and unemployment. In general, we have implemented basic functionalities for a stock website with techniques learned from our class (SQL, JDBC, JSP, ETL, etc.). Therefore, I think we have fulfilled the most fundamental and essential parts of our value proposition, and we have fully mastered those techniques and skills taught in class.

There are also a few incomplete parts in our project. At the beginning we planned to include a function on our website, which could evaluate the performance of users' portfolios and provide investment advice. However later we found this part was much more complicated than we had thought, because we could not make it with only SQL statements and JDBC. Rather, we need to use some advanced data analysis tools, as well as to find additional external data. This is beyond our ability since we both are Java rookies and don't have much experience on backend data processing, so later we give up this part. In addition, we could have presented charts and graphs when users look up the historical prices of stocks, but again, this requires advanced Javascript skills like using analysis module, which is another field that we are unfamiliar with. I think if we had taken courses like Web Development or Information Retrieval and have learned Internet programming before this project, we could have done much better in developing our product.

From our opinion, to improve the project experience, it will be helpful to teach some basic knowledge and operations on web programming, like CSS, HTML or Bootstrap. When doing this project, some groups have rich experience on web developing and are quite familiar with designing websites, and their products will probably end up quite fancy, while some other groups are inexperienced in this field and may end up with relatively rough products. It will be of great service to the latter groups to learn those relevant skills from class, for them to design their web pages better. (since we think JSP alone is not quite enough for web page designing) In addition, if we could see some demos of this project when it's first introduced, it would be quite helpful for us to get a clear understanding of how to begin and develop our product.