Criterion A: Planning

Defining the Problem

The stock market is a very fascinating human creation. However, it is not very well understood and many different factors that cannot all be accounted for go into the fluctuation of stock and other investment prices. I intend to construct an app that analyzed the data points of a certain stock and calculates different variables such as the beta and alpha index, and the coefficient of determination for the trend lines of the data points.

Rationale for the Proposed Solution

A standalone application for this project is the best option for multiple reasons. It makes it easy to start this relatively simple application from an icon. Moreover, there will not be any cross compatibility issues.

I chose to use Java as the programming language for this application because Java is a robust language that can work on many different platforms. An app like this would work best being used very often and not very in depth. So porting it to other devices would be helpful.

Starting Success Criteria

1. Creates user-friendly and simple GUI for the user to add several different data points of a proposed stock spread out across time.
2. Graphs the data points, trendline, and determines and displays different indexes.
3. The app will then give a decision on whether the proposed stock is an ideal investment and the user can input different stocks.