

**management**

Workshop: Finding Objects, then classes, then model

**Problem**

We need a system that compares analysts from records of the analyst's own stock buy/sell **transactions**, so we can recommend investors to invest with the best analyst. To understand what the **program** needs to do, it is first necessary to understand a little bit about the stocks, buy and sell transactions, and their records. We'll keep things simple, though, and only deal with basic **stock** purchases and sales.

**Overview**

In the domain of financial **investment**, individual **investors** may base buy/sell decisions on the opinions of investment analysts, who **spend** considerable time studying the fundamentals and potential of selected **companies**. When an investor relies on an analyst's recommendations to any degree, then that investor typically wants know something about the analyst's track **record**.

**Background**

Think of a share of stock as a piece of a company, albeit typically a very small piece. The value of a share is loosely related to the value of the company divide by the number of **outstanding** shares (i.e., total shares owned by shareholders.) For example, if a company was worth \$10M and there was a total of 1M shares owned by **shareholders**, then each share would be worth \$10.

In a stock market, all companies and their stock are **identified** by symbols, which are short character strings. For example, Amazon's symbol is AMZN, Apple's is AAPL, and Microsoft's is MSFT.

An investor will buy some number of shares at a specific **purchase** price and pay a small fee to a broker to complete that transaction. Then, at late time, the investor will sell all or some of those shares at a **sales** price and pay another small fee to a broker. Obviously, if an investor **sells** at a price higher than the purchase price (adjusting for the fees), the investor will make money. For example, if an investor buy 10 shares of AMZN at \$800/share for a \$10 fee, then sell those 10 shares at \$850/share for \$10 fee, that investor will make a profit of \$480.