

C++ FINAL PROJECT

This project is basically an implementation of an account management system. It consists of 2 parts – the stock portfolio account and the bank account.

1. Stock Portfolio

This portion of the project explores the stock management. A user can view the price per share of the stocks (using `viewAccountBalance(string)` function - this will return the price of each share), display the portfolio (using `printList()` – prints the stocks he has purchased/sold), buy and sell shares (`buyShares()` and `sellShares()` respectively, while printing the transaction details), view the graph for the portfolio values (using `viewgraph()` - uses MATLAB to view the graph), print the transaction history (using `transactionHistory()`), along with the option to return to the previous menu.

2. Bank Account

This portion of the project explores the bank account management system. A user can view the account balance (using `viewAccountBalance()` – prints the amount of money in his/her account), deposit/withdraw money to/from his/her account(using `deposit/withdraw` functions – which updates his/her account balance accordingly and prints the transaction details and stores to a file using `writeToFile(int)` function) and view the transaction history, which is displayed on screen.

The design patterns used were the strategy pattern and the wrapper and adapter pattern.