

# Portfolio Stock System

## Overview

Design and Implement a Stock Portfolio Management system.

This system should have two major subsystems: *a portfolio management system* and a *customer stock trading system*.

The main responsibilities of the portfolio management system are to:

- Manage the stocks available to trade and current prices
- Approve new customers
- Track (receive reports) of all customers and their *unrealized* and/or *realized* profits
- Notify all customers who have made more than 10k in realized trading gains they have the opportunity to create a derivative trading account (allowing them to trade options). *The ability to trade options is not to be implemented.*

The main responsibilities of the customer stock trading system are to:

- Request to create a trading account
- Allow money to be added/deducted from a personal account
- Trade existing stocks
- See personal realized and unrealized profits

There should only exist one portfolio manager, but multiple customers may be active at the same time.

Main Requirements:

1. Graphical User Interface
2. Persistent data (the system should be able to restart without losing the data).
3. Strong OO infrastructure