

STOCK MARKET SIMULATOR

This is a basic implementation of a Stock Market Simulator in C++ using the concepts of OOPs, Multithreading, Mutual Exclusion algorithms(mutex locks) and some Data structures like Unordered_map.

There are 3 Main classes:

- **Stock:** The **Stock** class represents a stock with a symbol, current price, and available volume. It can update its price and volume.
- **Trader:** The **Trader** class represents individuals participating in trading. Each trader has a name and a portfolio of stocks they own. Traders can place orders to buy or sell stocks and can display their current portfolio.
- **Market:** The **Market** class manages a collection of stocks available for trading. It allows adding stocks to the market, executing trading orders for traders, and listing all available stocks in the market.