Automated Stock Trading System

- A customer approaches YOURSTRULYTradingSolutions with the need for an architecture design for an automated stock trading system. The system needs to take in a list of stocks, related to specific sectors and buy/sell these stocks based on some predefined algorithms.

- The system needs to perform well (place many orders) and scale to support many investors.

- Your task is to propose an architecture for the system, accompanied by an informal evaluation of the advantages and disadvantages of the proposed architecture.
Automated Stock Trading System

- **Input**
  - List of sectors/stocks to trade
  - List of investors and their daily budget

- **Output**
  - Notification to buyers/sellers
    - List of stocks bought/sold
    - Cost, if bought; Gain/Loss, if sold
  - Withdraw/deposit money based on orders
Automated Stock Trading System Assumptions

■ Historical data of all stocks will be provided (very large)
  – To perform historical analysis on the stocks/sectors

■ Buy/Sell algorithms will be provided by financial engineers
  – To know which stocks to buy/sell

■ Investor personal data will be provided
  – To withdraw and deposit money