



1. The Bank plays as the middle ground between the AuctionHouse and the Agent.
2. The Bank will be able to store information about the Agent such as the account number, the Agent's bank balance and information about what are the available AuctionHouses and their host and port number and provide them to the Agent for connection. It will be able to communicate with the Agent and AuctionHouse through BankProxy
3. The AuctionHouse will be the main factor that will execute different tasks. Such as providing the available items, what is its starting bid? What is the current bid? What is the minimum bid? It is also verifying incoming bid whether it meets all the requirements. If the bid is valid the status will be ACCEPTED, if not the status will be REJECTED, if you are the current highest bidder, and someone makes a better bid, the status will be OUTBID, and if you win, the status will be WINNER. The AuctionHouse will be able to communicate with the Agent and Bank through AuctionHouseProxy. The AuctionHouse is both a Server and a Client.
4. The Agent is the main part of the program since it is the one that initiates different tasks such as requesting connections, create a bank account, choose an AuctionHouse, making a bid on item, etc. I will read in the message in the terminal, identify the message and execute different tasks based on the message. For the Agent, it requires two different proxies, one is the AgentProxy mainly for listening and communicating to the Bank server, and the AgentAHPProxy is mainly for listening and communicating to the AuctionHouse server.