

Description

Agent: human users who are allowed to bid on any open auction houses. Will start a bank account with the bank with a provided initial balance and name.

Bank Proxy: represents a proxy for the bank as a way of communication between its clients being the Agents and Auction Houses. Provides clients balance updates and transfers funds.

Auction House Proxy: proxy for auction house as a way of communication between the auction houses and the agent and bank. A way to allow for multiple bidders at the same time.

Autobidder: will represent provided amount of automated agents that randomly make bids at random auction houses. The autobidders are agents, so they have a bank account, but simply run by themselves.

Bank: represents the bank server, which will be the host for both the agents and auction houses as they will both have bank accounts and will talk to the bank when bids are placed. Will handle all funds being transferred and stored in the bank.

Auction House: each auction house will register with the bank and then open itself as a host

to agents, allowing them to make bids on items they are selling. Each auction house will hold 9 different items to be sold.

Accounts: all bank accounts for the clients being the agents and auction houses. They have some balance and an available balance to be updated when bids happen

Items: items to be sold from the auction houses. There are 9 items that can be sold with some minimum bid that's required for them.

Display: the user interface for the agent which will provide a way for the agent to interact with several different auction houses and bid on items. The agent will receive update messages as they bid.

AH Display: the auction house display provides a way for the auction house to view all bids happening on different items in that given auction house as well as the agents currently connected to the auction house.