

Description of Bank Package

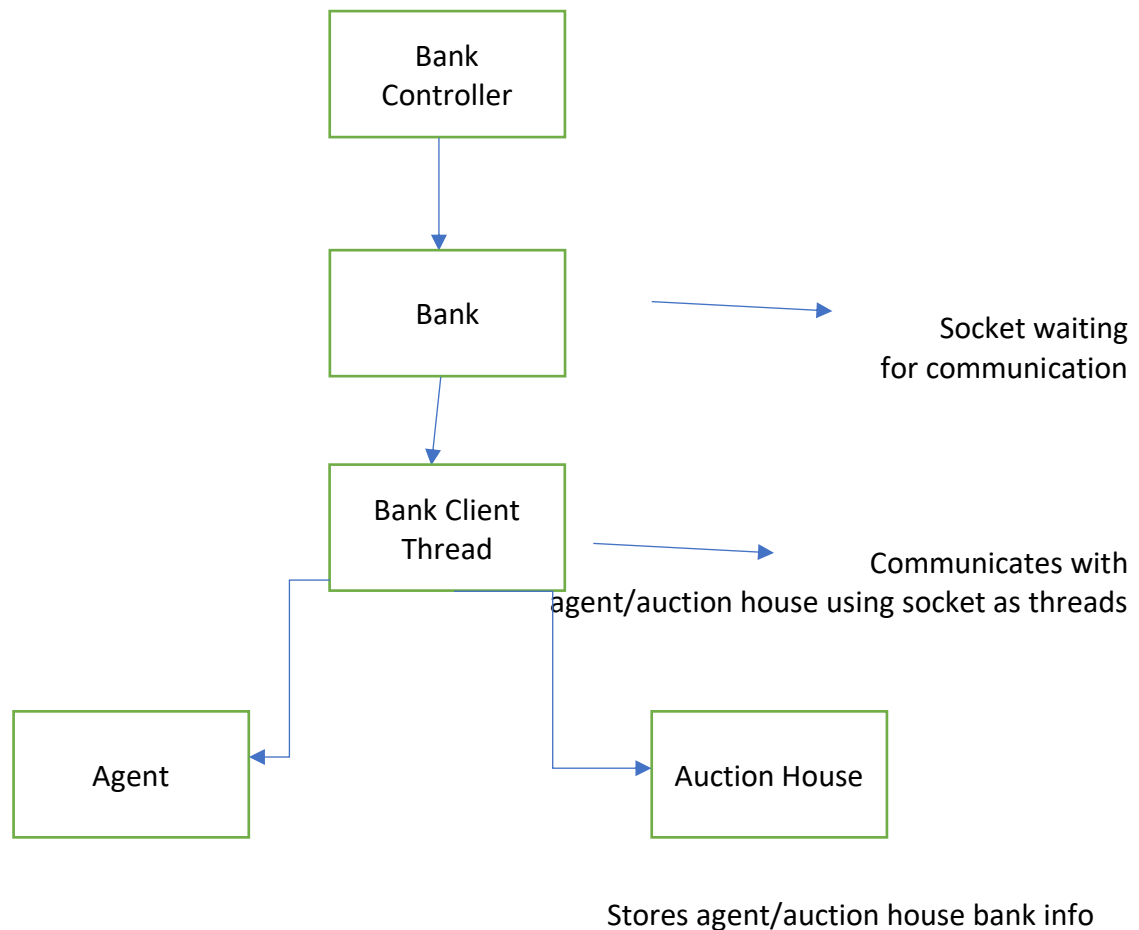
Bank Controller- Bank Controller initializes the Bank object of the program.

Bank – Bank opens the socket for connection of its clients. If it finds a client and creates a new thread for each client using Bank Client Thread.

Bank Client Thread – Bank Client Thread is used to communicate with its client whether it is an agent or auction house. Bank Client Thread will give out balance to its clients, block funds for auction house, pay to auction house, etc.

Agent – Information about its client agent is stored in this class.

Auction House – Information about its client auction house is stored in the class. The Host Name and Port Number of auction house is also stored here so that Bank Client Thread can give this information to Agents.



Description of Auction House package

Auction House Controller- Initializes Auction House object, which creates connects with Bank and creates server thread to contact agent/agents.

Auction House – It establishes connection with Bank and gives the network information about the current auction house server

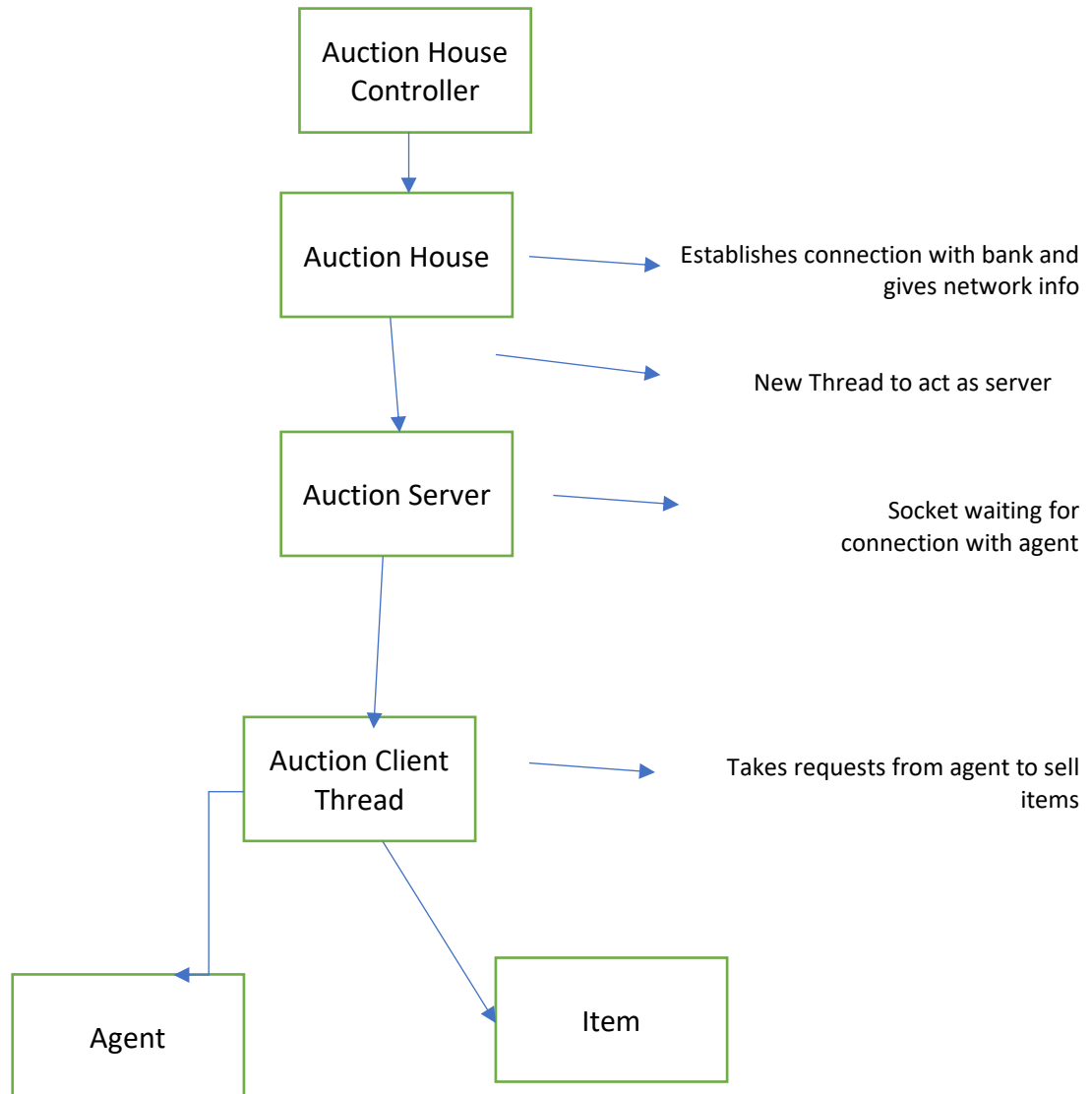
Auction Server – Here the socket of auction server is waiting for agent to connect. After connection is made, it creates a separate thread for each agent.

Auction Client Thread – Auction Client Thread takes requests from an Agent and sells items to the agent using timer.

Agent – Stores client id information given by bank of agent and socket of that agent communication in the class

Item – Item present in the auction house including its minimum bid, name, etc.

Design Diagram for Auction House Package



Description of Agent package

Agent Controller- Initializes Agent object.

Agent – Connects with Bank Server. Gets list of auction houses and can buy items.

Wait Auction Message – Separate Thread created for agent to wait on whether he won the item on auction or got outbid.

