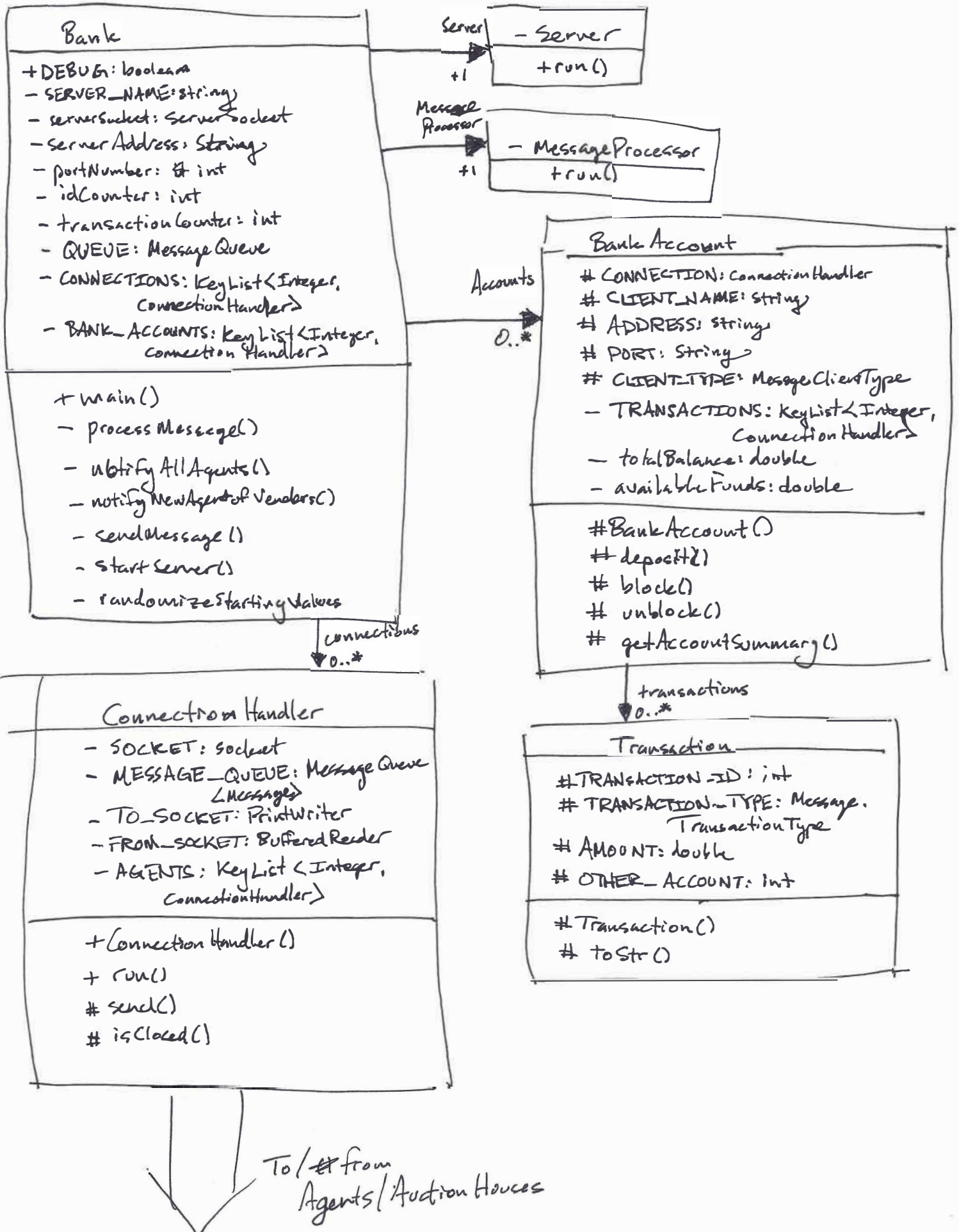


Project 4: Distributed Auction House Object Diagram



Auction House

- server Socket: ServerSocket
- name: String
- serverAddress: String
- serverPort: int
- AccountNumber: Integer
- bankConnection: ConnectionHandler
- AGENTS: KeyList<Integer, ConnectionHandler>

Message

- Queue: MessageQueue
- ITEMS: KeyList<Integer, Item>
- Scheduler: ScheduledExecutorService
- itemTimers: ScheduledFuture<?>[]

- + main()
- processMessage()
- sendAgentsItemUpdate()
- sendToAgent()
- connect()
- getVcerInfo()
- initialize()
- startServer()

connections

to...

Connection Handler

Same as other

to bank and agents

timer

1..3

- BidTimer

- message: Message
- + BidTimer()
- + call()

Server

1..+

- Server

- + run()

processor

+1

- Message Processor

- + run()

Items

1..3

Item

- # Name
- # DESCRIPTION
- # STARTING Price
- # ITEM-NUMBER
- itemState
- highest Bidder
- highest BidderID
- highest Bid
- transactionID

- # Item()
- # toString()
- # getHighestBid()
- # getHighestBidder()
- # getItemState()
- # setItemState()
- # setHighestBidder()
- # setHighestBid

Agent

- name: String
- account Number: Integer
- bankConnectionHandler: ConnectionHandler
- displayWriter: DisplayWriter
- InputReader: InputReader
- VENDORS_CONN: KeyList<Integer, ConnectionHandler>
- VENDORS_DISP: KeyList<Integer, ConnectionHandler>
- QUEUE: MessageQueue<Message>
- ITEMS: Linked List<Item>
- bidsOpen: int

- + main()
- connect
- getUserInfo()
- initialize

Vendor info

- VendorSummary
- # VENDOR_NAME: String
- # VENDOR_ITEMS: KeyList<Integer, Item>
- ~~Course~~
- + VendorSummary()
- # updateItems()

Output to user +1

- DisplayWriter
- # printToUser()
- # putAccountStatus()
- # refresh()
- # validateVendor()
- # validateItem()
- # sendBid()

input from user +1

processing +1

- Message Processor
- + run()

InputReader

- reader: Buffered Reader
- InputState: InputState
- vendor Selection: int
- item Selection: int
- # OPEN_PROMPT: Str
- # VENDOR_PROMPT: Str
- # ITEM_PROMPT: Str
- # AMOUNT_PROMPT: Str
- # CLOSE_NOTICE: Str
- # OPEN_PROMPT: Str
- + InputReader()
- processInput()

state

- # InputState

ConnectionHandler as seen before

to bank and auction house