

CS 351

Design of Large Programs

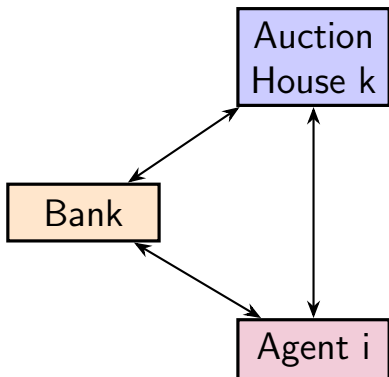
Auction Project Design Ideas

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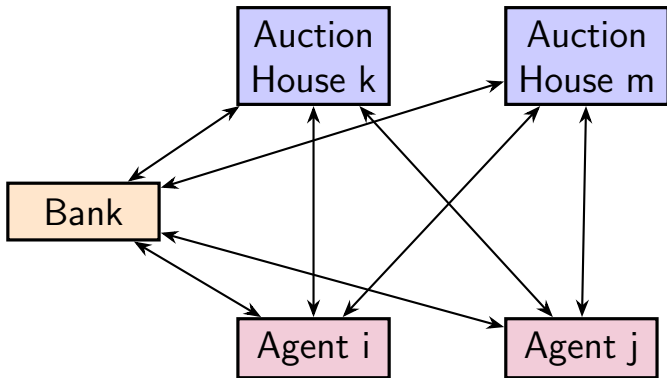
Spring 2025

Distributed Auction



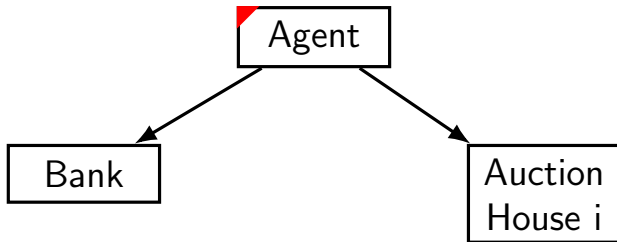
Each program may be on a separate physical machine, communicating via sockets.

Distributed Auction



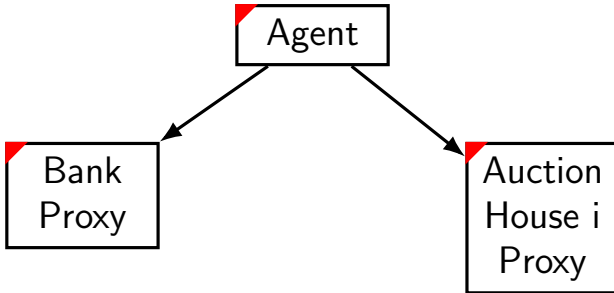
Each program may be on a separate physical machine, communicating via sockets.

Agent: What if everything was local?

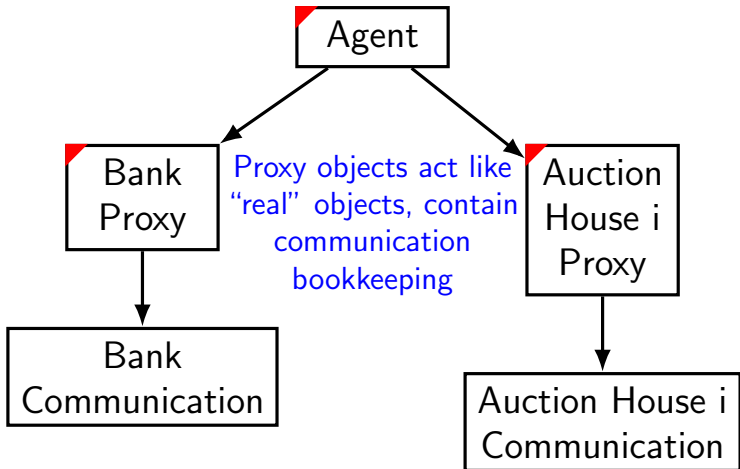


- Agent could invoke methods on Bank and Auction House objects directly.
- Depending on design, they might also be active objects.

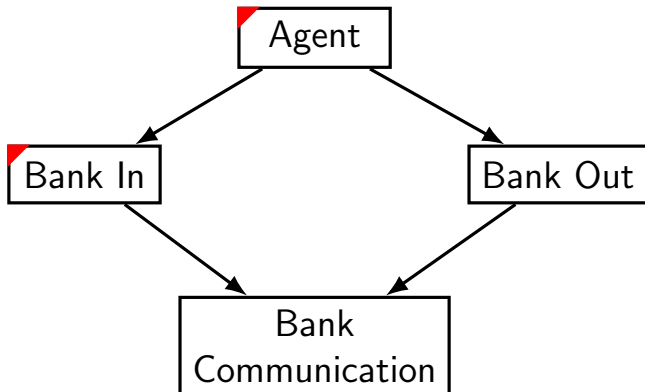
Agent: Use Proxy Objects



Agent: Use Proxy Objects



Separate Objects for In and Out



- Need separate thread to listen for input
- Output may be driven by agent thread
- Can communicate with auction houses similarly