Week 4a: Tuesday, February 8th
Good Afternoon, Colleagues

Are there any questions?
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• Where does the soccer sensory model come from?
Logistics

- Programming assignment 4 - any questions?
Logistics

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- Week 5 assignments are up
Some Definitions

- Distributed Computing:
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- **Multiagent Systems**: Behavior coordination or behavior management.
  - No necessary guarantees about other agents.
  - Individual behaviors typically simple relative to interaction issues.
Multiagent Systems

- Study, behavior, construction of possibly preexisting autonomous agents that interact with each other.
  - incomplete information for agents
  - no global control
  - decentralized data
  - asynchronous computation
Why Multiagent Systems?
Why Multiagent Systems?

(7)

• Some domains require it. (Hospital scheduling)

• Interoperation of legacy systems

• Parallelism.

• Robustness.

• Scalability

• Simpler programming.

• “Intelligence is deeply and inevitably coupled with interaction.” – Gerhard Weiss
Organizations

• Hierarchy:
Organizations

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- **Community of Experts:**
Organizations

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- **Market**
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Organizations

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- **Market**: bid for tasks and resources; contracts

- **Scientific community**: full solutions (perhaps with varying information) combined
Class discussion

Joseph Knaack on organizing a paintball team