Good Afternoon, Colleagues

Are there any questions?
Logistics

- Programming assignment 4 - any questions?
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- A couple more talks:
  - Illah Nourbakhsh: personal rovers
  - Rosaline Picard: emotional intelligence
Logistics

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• Schedule change
Class discussion

Mohamed Fakhreddine on the issues related to a particular multiagent system.
Some Definitions

- Distributed Computing:
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Peter Stone
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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
Issues and Challenges

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• Engineering
Dimensions and issues

- cooperative vs. competitive
- communication
- trust
- recursive modeling
- coalitions
- game theory
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Convoy example