Introduction to Multi-Agent-Programming

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Exercise Sheet 1
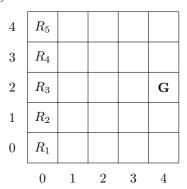### Due: November 2nd, 2010

Exercise 1.1 (Concepts and Definitions (1 Points))

Fill the table to describe the environment of the simulation software. Please give a short explanation. The first row is an example.

Observable	partially	the state of the system is unknown for the agents
Deterministic		
Episodic		
Static		
Discrete		
Agents		

Exercise 1.2 (Contract Net and Blackboard (4 Points))

Consider the following grid world:

The cell G need to be visited by one of the robots $\{R_1, R_2, R_3, R_4, R_5\}$. Each robot knows its own position and the position of G. Manhattan distance is used to estimate the path costs.

(a) Use the contract net to solve the problem?

(b) Use blackboard to solve the problem?

(c) What are the differences?

NOTE: Please briefly describe your solution.

The written part should be submitted during the lecture on Tuesday (Nov. 2th)