Assignment 5

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AntMe

This programming assignment gives you the opportunity to implement swarm intelligence for an ant colony, and to compete with your classmates. It counts 10% towards the final grade.

Instructions: You are allowed to work alone or in teams of two students. Implement your swarm intelligence for the AntMe-simulation based on the template provided on the course webpage.

Notes: This assignment requires programming in C#, in particular Visual Studio 2012 or later. It is preinstalled on the images provided by the faculty. The project can be opened via the *AntMeProject.sIn* file, the actual file to do modifications in is then *antIntelligence.cs*.

Conditions:

- 1. To reduce the complexity and increase the fairness, fighting other ant colonies is not allowed.
- 2. No use of static data structures is allowed, i.e., the only way that ants can share information is by markers.
- 3. The configuration file *DS-competition.ant.config* is used.

Evaluation: On May 26, a competition will be organized to determine the best swarm intelligence. The exact mode will be decided when the number of participants is clear.

Deliverables

- 1. A report of 2-3 pages explaining your implementation, in particular focusing on the strategy of collaboration and the messages exchanged.
- 2. The file **AntMe.SpielerCS.dll** that can be found in the *bin* directory of your project.
- 3. A brief explanation (~3 minutes, no slides) of your solution at the tournament.

Submission: Friday, May 26, 8:30 via Moodle.