

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 2013 (the community edition is available for free, alternatively, it is also installed on the lab machines in rooms E331, E431 and E531). The project can be opened via the *AntMeProject.sln* file, the actual file to do modifications in is then *antIntelligence.cs*.

Restrictions:

1. To reduce the complexity and increase the fairness, note that 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.

Evaluation: On 31st of May, 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 3-5 pages explaining your implementation, in particular focusing on the collaboration and the messages exchanged.
2. The file ***AntMe.SpielerCS.dll*** that can be found in the *bin* directory of your project.
3. An informal presentation of ~5 minutes of your solution at the tournament.

Submission: Monday, 30th of May 2016, 10:00 via Moodle (you may still submit improved code immediately before the tournament)