Introduction to Multi-Agent-Programming

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Exercise Sheet 8

Due: January 14th, 2009

Exercise 8.1 (Firebrigade-Agents)

(a) **Implement intelligent Firebrigade agents (2pt, programming)** Implement working Firebrigade agents, that contain all basic features for performant firebrigade agents (fire clustering, assignment of agent coalitions (or the grand coalition) to fires, assignment of agents to burning buildings). Implement at least one non-trivial algorithm (e.g. coalition formation, geometric understanding of fires, etc.).

(b) **Feature Documentation (2pt, written)** Write a detailed description of your approach and all the features you implemented. State how you implemented the different features and why, as well as their usefullness, when you applied them.

(c) **Performance (2pt, programming)** An extra two points will be awarded, if the agent's perform significantly better than SampleAgents. An average score of +20% will suffice. This value might be lowered or other properties might be also regarded as "performing better".

Please send your solution to dornhege and zhangd @informatik.uni-freiburg.de
*Note: We encourage you to submit the written solution in a **pdf** file. The latex template is available at the exercise web page.*