

## The Tournament System

The game which will be the battleground for this competition is called Domination Game and was developed by Thomas van den Berg and Tim Doolan. You can download or clone a ready-made version from our repository (<https://github.com/Nathanaelion/CAT2018>).

In this game, two teams of agents are competing for control of a number of control points on a map. The agents are able to pick up ammo and shoot one another. Points are awarded for control of control points over time. The winning team is the one with the most points after a given number of time steps has passed (in our case, 150). For more information about the game itself, please consult the documentation (<https://domination-game.readthedocs.io/en/latest/>) or the intro slides.

Each agent in your team is controlled by one and the same agent script which you program in advance and submit to the CAT Team, specifically via email to [mpoemsl@uos.de](mailto:mpoemsl@uos.de) or [sselbach@uos.de](mailto:sselbach@uos.de). Apart from human remote control, you may use any means which prove to be effective in this script - neural networks, machine learning, hard-coded instructions, fairy dust, etc.

There are two competitions and two respective submission deadlines in this tournament: The Casual Clash with submission deadline on Saturday at 12:00, and the Final Showdown with submission deadline on Sunday at 12:00.

The Casual Clash merely a spectacle which provides the opportunity for the teams to analyze the other agents and get a first glimpse at the competitiveness of their own agent. The results of the Casual Clash do not count towards the end result. We published the script that will be used for the Casual Clash in our repository, so that you can simulate it beforehand with your own agent.

The Final Showdown is the actual competition of this tournament which will evaluate the final submissions of all teams and crown the best agent among all of them. It will follow a similar mechanism like the Casual Clash, but there may be some surprises in for your agent.

We have devised three game modes for the Domination Game, "Duel", "Skirmish" and "Battle". All games in the tournament will consist to 1/3 of each of them. They are determined by the kind of map the game is played upon. You can look up the specifics of the three modes in the Casual Clash evaluation script.

Finally, if you have any questions, do not hesitate to ask one of the CAT Team members, there will always be someone around in building 92 during the time of the competition.

We wish you good luck & may the competition commence!