Trading agent for Advertisement Auctions

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1 Problem description

A major part of revenue of the web search engines such as Google or Yahoo comes from placing paid textual advertisements next to the regular search results. These advertisements are placed in auctions, where the advertisers who are willing to pay the most for a click on their advertisement are placed the highest. Finding a right strategy for these auctions is an interesting optimization problem, because a bidder has to balance concerns between obtaining enough clicks and not paying too much for them.

The annual Trading Agent Competition (TAC) (*http://aa.tradingagents.org/*) provides a framework to test bidding strategies in a simplified environment of advertisement auctions. It enables its participants to let their agents compete against other agents from all around the world. The goal of this project is to develop a trading agent which would participate in the next year's competition. A trading agent from LIA participated already in TAC 2009. The student will be able to build on this work.

2 Goals

1. Familiarize with the environment of advertisement auctions and Trading Agent Competition.
2. Implement a trading agent for advertisement auctions
3. Participate in the international Trading Agent Competition, which will be held in June 2010.

3 Skills

The student should be familiar with Java and should be able to communicate in English, both oral and written.