Tablut Unibo Competition
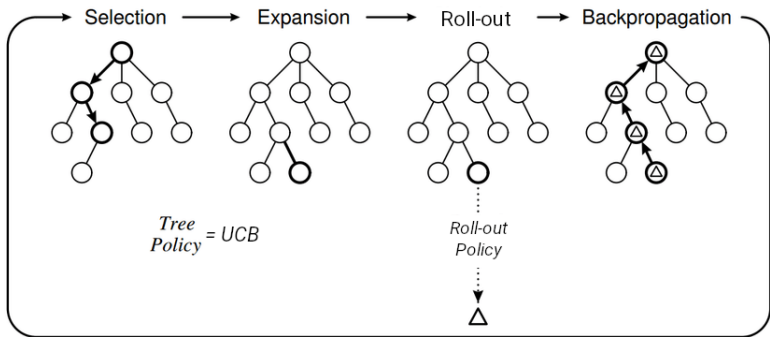
UCT-based agent for Tablut

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UCT Algorithm

UCT : **UCB** applied to Trees
UCB : Upper Confidence Bound

Environment

Environment is modeled as a **MDP** with the following properties:

- Finite State Space
- Finite Action Space

As a result the UCT Branching Factor is finite as well.

Reward:

- At the reaching of the Terminal State, the agent gets a positive or negative reward according to the current player and the winner of the match.
- Draw is not considered as a match outcome.

The implementation has been carried out with:

Strengths and Weaknesses

Strengths	Weaknesses
Great Generalization	Branching Factor Dependent
Guaranteed Convergence	Roll-out Dependent

Upcoming Improvements

- Neural Networks
- Symmetry Exploitation
- Parallelization