Taiji - A Board Game

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1 Game description

1.1 Rules

Taiji is a game for 2 players where the goal is to get the highest score. The score is determined by the (sum of the) size of the largest group of horizontally or vertically adjacent (diagonal alignment not included) squares of the players' respective colour (light or dark). The game is constituted concretely by pieces and a 7 by 7 board. The placeable pieces of the game are called TAJITUs: 2-square wide rectangular pieces (2x1) with both of the colours, one in one of the halves, the other on the other half.

The game starts by determining randomly the colour of the 2 players, having the first turn the player with the light colour. One at a time, players alternate to place one TAJITU on the board until the game reached a state where there is no space for another TAJITU to be placed, meaning that a player might be helping the other one to win the game because each piece has both colours. At the end, if a tie in the number of points occurs, the dark colour player wins.

1.2 Setup

To start a game, one must first start the **Prolog server**. To do this, open a **SICStus** terminal, consult the file `server.pl` and run the predicate `server.`

1.3 Instructions

After this, a game can be started by adjusting the settings in the gui menu, choosing the desired game mode and A.I. difficulty, and then pressing the `Start Game!` button.

Then, the colors **white and black** will be randomly assigned to each player and the white player goes first in placing a piece.

This is done by selecting two adjacent cells, such that the first one will hold the part of the piece of this player's color. One can also deselect the first clicked cell by clicking anywhere on the scene other than the possible adjacent cells (which light up).

During this gameplay phase, the **Undo** and **Movie** options are available. The first removes the last placed piece from the board, and the latter replays the game up to the current state.

Throughout the whole game, the players can also toggle between two existing scenes: a zen garden and a room, each of them with two different view points and lights.

Finally, there is a zoom button that toggles how close or far the camera is to the board and a second button that locks or unlocks the camera. This can be used to fully appreciate the animations implemented.