Cage Manual

Running

Use Sicstus to consult the file server.pl ('/src/prolog/server.pl'). Then, initialize the server with: 'server.'.

Open localhost server and navigate to the folder 'src' of the project. The application should initialize.

An internet connection and a relatively recent browser are recommended (for reference this was developed in Chrome 55).

User Instructions

In the main menu, the users have the option of three game modes – Player vs Player, Player vs Computer and Computer vs Computer. They can also watch game replays previously saved, change game options and check the game rules.

<u>Game</u>

On the game page, clicking on the top left icon returns the user to the main menu. On the top middle, the number of pieces of each player is shown, with the current player highlighted. In the middle, if a human player is playing it shows how much time he has left to complete his turn. On Player vs Player there is also the option to undo previous moves, by clicking on the button on the top right corner.

To play the game, on their turn, the players should select one of their pieces with a left-mouse click. The selected piece is highlighted with a pulsing green color and the tiles that represent valid moves are also highlighted in green. The camera angle can be changed by pressing the C key on the keyboard.

When a player captures all of his opponent's pieces or the turn timer expires, the game ends and the winner is shown. On this screen the option to save the replay of the game is offered. In order for the replay to be accessible later it must be saved on the '/src/videos' folder of the project.

<u>Options</u>

On the options page, the user can choose who goes first – white or black, the amount of time allowed to complete a turn (it is turned off by being all the way to the left), the AI difficulty and the theme (changes the visuals of the game).

<u>Replays</u>

To watch replays, the user must insert a valid file name (file must be in '/src/videos' on the project directory), without the file extension.

The interface is similar to the game interface. The replay can be freely paused and resumed by clicking the button on the top right of the page or by pressing the X key on the keyboard.

Rules

Restrictions

The following restrictions restraint all player moves.

Never place a checker orthogonally adjacent to a checker with the same color.

Never move a checker with orthogonal adjacencies to a square where it doesn't unless it's a jump.

Centering move

Move a checker to an unoccupied adjacent tile, which reduces the checker's straight line distance from the center point of the board.

Adjoining move

If a checker as no orthogonal adjacencies with enemy checkers, it can be moved to an adjacent tile which does.

Jumping move

A checker can capture an orthogonal adjacent enemy checker by jumping over it, to the tile on its opposite side. The tile it jumps to must be empty. Alternatively, if the checker jumps out of the board, both pieces are removed. If there is any jump move available at the position the checker jumps to, the player must do so.

Only one move can be done per turn (excluding the multiple jump exception).

Object of the game

To win, a player must capture all enemy checkers.

For more in-depth rules visit: http://www.marksteeregames.com/Cage_rules.html, or click on the 'Help' button of the application's main menu.