

Othello Testing

Below is some basic testing for our Othello program carried out on the lab machines in the Jack Cole building on Linux. In the output column terminal output is included in addition to image names of screenshots in the “screenshots” directory which represent the board state produced from each test where relevant. Testing for network play and AI use is not covered in depth here as it is difficult to demonstrate their functionality with screenshots so it is recommended you try them out yourself.

Input	Reason	Output
dist/build/othello/othello	Starting position	start.png
Clicking position (5,7)	Invalid move from starting position	Left button pressed at: (5,7) Invalid move
Clicking position (4,2)	Valid move from starting position	Left button pressed at: (4,2) Valid move validMove.png
dist/build/othello/othello -s 2	Size argument too small	othello: Size must be at least 4, no more than 16 and even
dist/build/othello/othello -s 18	Size argument too big	othello: Size must be at least 4, no more than 16 and even
dist/build/othello/othello -s 7	Odd size argument	othello: Size must be at least 4, no more than 16 and even
dist/build/othello/othello -s 4	Min size	minStart.png
dist/build/othello/othello -s 16	Max size	maxStart.png
u key after starting move	Undoing a move (timer is undone as well)	Key 'u' down Reverted to previous player turn beforeUndo.png afterUndo.png
u key before any moves have been made	Undoing when there have been no moves	Key 'u' down Cannot undo further back than current stateu
dist/build/othello/othello -r	Alternate starting positions	beforePlacement.png afterPlacement.png
dist/build/othello/othello -h	Start game with hints turned on so that available moves are highlighted	hintsStart.png hintsMidGame.png

dist/build/othello/othello -r -h	Hints with choosing start position	hintsCooseStart1.png hintsChooseStart2.png
Pressing h in game	Change hint settings in game rather than setting argument	beforeHintsOn.png Key 'h' down afterHintsOn.png
Press p in game	Pauses the game	Key 'p' down paused.png
Pressing s mid game then starting a new game and pressing l	Should be able to save and load a game	savedState.png Key 's' down Saving game state beforeLoad.png Key 'l' down Loading saved game state afterLoad.png
<Computer 1> dist/build/othello/othello -server -s 6 -h <Computer 2> dist/build/othello/othello -client pc3-032-l.cs.st-andrews.ac.uk	Setting up server, timers disabled for both players	serverSide.png clientSide.png (Both are the same, starting world successfully transferred to client)
White player winning 4x4 game	Should display screen stating white wins as they had more pieces	whiteWins.png
Black player running out of time	Should display white wins screen even if black had more pieces	outOfTime.png
4x4 game ending with both players with same number of pieces	Game ending with players with equal pieces should result in a draw	draw.png