

Chapter 1

Graphical Interface

Pawned's Version 1.1 supports three games: Standard Antichess, Encastle Antichess, and Connect N.

The graphical interface requires that *Java Web Start (JAWS)* is properly installed in your computer.¹ You may download JAWS from:

<http://java.sun.com/products/javawebstart/>

Once installed, you can download *Pawned* from the following website:

<http://web.mit.edu/reipince/www/pawned/>

Open or save the *pawned.jnlp* file in your computer. If you want to be able of loading and saving games, make sure to trust the signature of this application. After loading, you will see *Pawned*'s main window.

On startup, the main window consists of three menu bars, a toolbar, and an empty main panel. After starting a game the main panel will display:

- A graphical representation of the board and pieces of the game.

¹ *Pawned* does not run on Mac OS X because as of SWT 3.2, SWT applications are not deployable using JAWS on Mac OS X

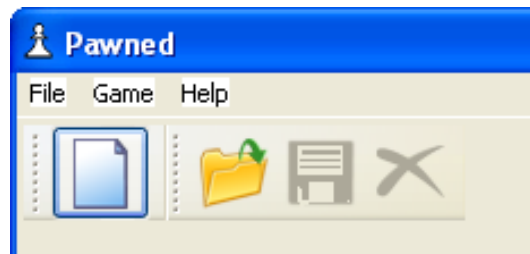


Figure 1.1: Menu and toolbar

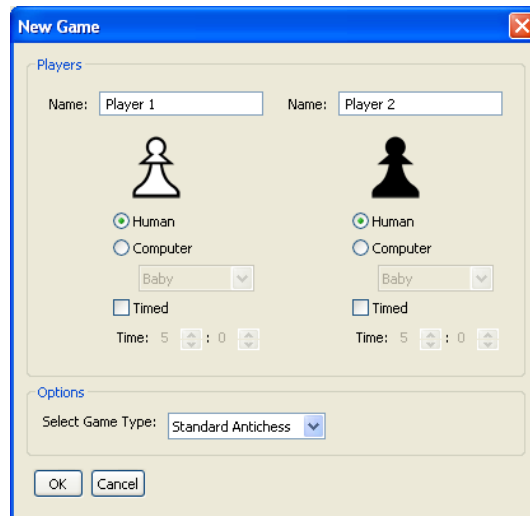


Figure 1.2: New Game window Standard Antichess options

- The names of the players (if they were given) along with the color of the pieces they are using.
- A timer for each player that shows how much time left the player has to complete all his moves. If no time limit is selected, an infinite symbol is displayed.
- A move history displaying all the moves that have been made throughout the game.

Furthermore, when playing any of the Antichess variants, the main panel will display the pieces each player has captured. A numbering appears next to Antichess board, allowing the user to easily reference a cell in it.

1.1 Starting a new game

To start a new game, select File > New Game or click the New Game button in the toolbar. This will open a new window (Figure 1.2) where you can choose the settings of the new game. For each one of the players you can:

- Input the name of the player in the 'Name:' text field.
- Select between Human or Computer player.
- If Computer player is selected, select between three levels of difficulty (Baby, Kid, Adolescence).

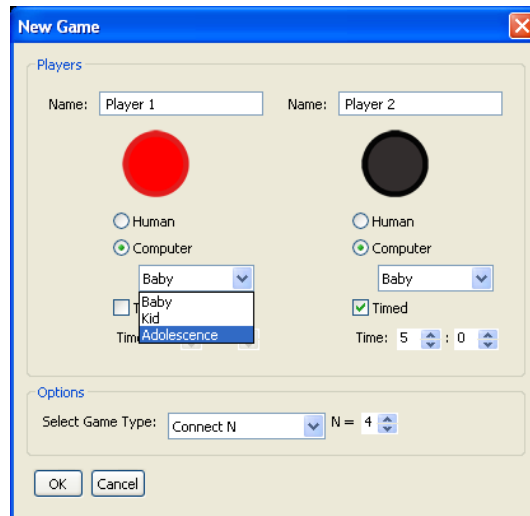


Figure 1.3: New Game window Connect N options

- Select the Timed checkbox if a timed game is desired. If checked, input the desired time limit in the fields below - minutes in the first field, from 0 to 60, and seconds in the second field, from 0 to 59 - by either typing the numbers or using the arrows to increment or decrease the time limit displayed as default. *(Note: You can not start a game with 0 time in any of the timers)*

Then, you can select the type of game you want to play. The default is set to Standard Antichess, but you can choose to play EnCastle Antichess or Connect N. If you choose to play Connect N, a field to select the value of N will become visible to the right of the Options section. A valid value for n is an integer between 2 and 7 inclusive. The upper bound corresponds to the Connect N's board dimensions that *Pauned* supports (7x6).

Finally, click 'OK' to start the game. At any time you may exit the New Game window by clicking 'Cancel'.

If you are playing Antichess, once you click 'OK', the pieces will appear in the board, and the timers, if any, will start to run. No pieces will be displayed for Connect N as the board's initial position does not contain any piece. If both players were chosen to be computer players, then the user will be an observer and will not be able of accessing the board in any way. If you are a player, then you will be able of making a move during your turn.

You know whose turn it is by looking at the players' information panels at the upper right corner of the main panel: the panel of the player who has to play will be highlighted. If you are playing Antichess, the captured pieces are displayed below the players' panels. At the bottom you can find the move history. The first column corresponds to the move history of the white player and the second column to the



Figure 1.4: Player 1 is playing with unlimited time, and Player 2 has 4:55 minutes left in his timer. It is black player's turn, as is indicated in the players' information display. The possible cells to where Player 2 can move with the Queen are highlighted in blue. The last move made by Player 1 is highlighted in purple.

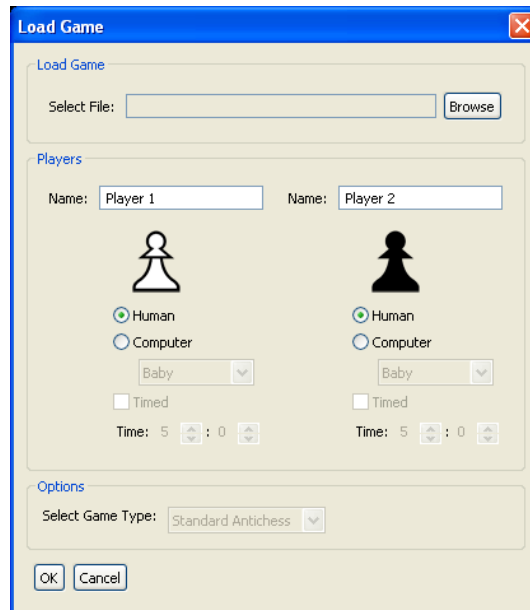


Figure 1.5: Load Game

history of the black player.

1.2 Loading a game

You can load a game by going to File > Load Game or clicking the Load Game button in the toolbar. The Load Game window will be displayed (Figure 1.4).

This window is similar to the New Game window, but it allows you to select a file from a File dialog when you click 'Browse' (upper right corner). Once you select the Xml game file and click 'Open' in the File dialog, the Load Game window will refresh to show the time settings and game type of the saved game (if the game was timed, the time remaining will be displayed in the Time fields). You are allowed to change the time settings of the game before loading it, and decide the type of players that will play (Human or Computer). However, you will not be able of changing the game type.

Pawned will notify you if the selected game file is invalid or corrupted. Also, it will not let you click 'OK' without selecting a file.

After you are done with the settings, you can click 'OK' to load the game. At any time you may exit the Load Game window by clicking 'Cancel'.

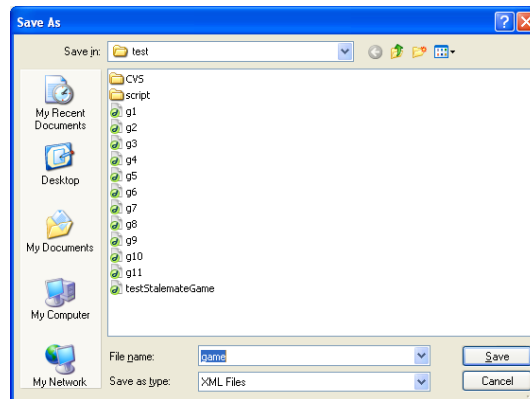


Figure 1.6: Save Game

1.3 Saving a game

You can save a game in process by going to File > Save Game or clicking the Save Game button in the toolbar. A File dialog that will let you choose where to save your game will appear. The game will be saved as an Xml file. For more information about the format of this file refer to the Appendix.

1.4 Ending a game

You can choose to end a game in process by going to Game > End Game or clicking the End Game button in the toolbar. Ending a game will stop the current game, and will leave the display of the game status as it was before ending. *Important: You cannot go back to a game or try to save it after ending it using this option.*

1.5 Changing the display options

Standard Antichess and EnCastle Antichess have three display options set as default:

- Highlight Movable Pieces - Highlights the pieces that can be moved by the user in a given turn.
- Highlight Possible Moves - When the mouse hovers over a movable piece, the cells to where this piece can move are highlighted.
- Highlight Last Move - Highlights the last move in the game.

These settings can be changed by the user at any point during the game by going to Game > Display Options. An option is enabled if there is a checkmark next to

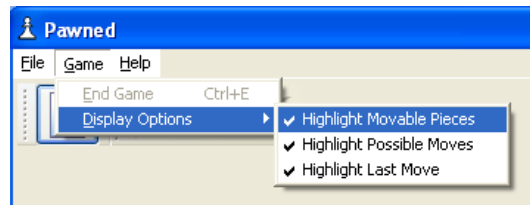


Figure 1.7: Display Options

the text describing it. A click on the option will check or uncheck it. Changes in the display options will be enabled in the next player turn.

(Note: Connect Four does not support any of these display options)

1.6 Getting help

The user manual can be accessed by going to Help > User Manual.

1.7 Quitting *Pawned*

You can exit the application by going to File > Quit or by clicking the Close button (X) in the upper right corner of the main window.

1.8 Hot keys

Use the following keyboard shortcuts to access some of the basic functionalities of *Pawned*:

- New Game - Ctrl + N
- Load Game - Ctrl + O
- Save Game - Ctrl + S
- End Game - Ctrl + E
- User Manual - Ctrl + U
- Quit - Ctrl + Q

1.9 Antichess: Moving the pieces

In the Antichess games, you can move the pieces by making a first click on the piece you want to move, and then making a second click in the cell where you want to end.

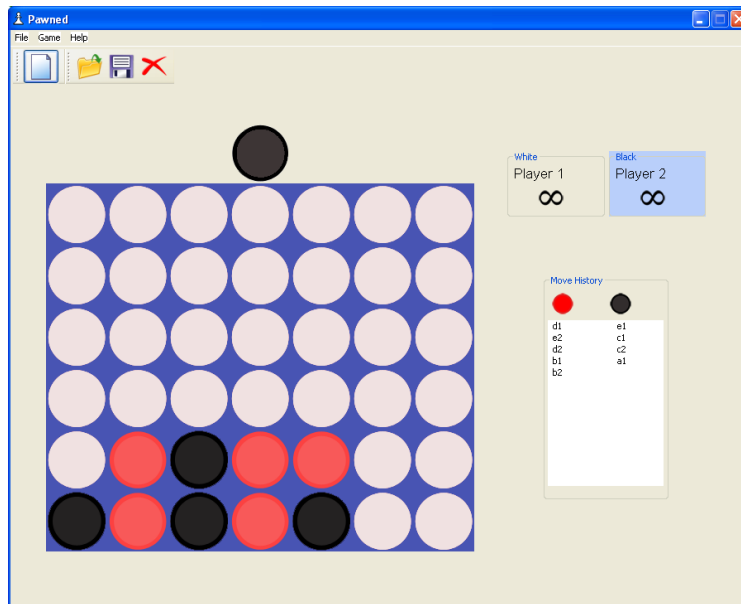


Figure 1.8: Playing Connect N

If you make a click on a piece, and later choose not to move it, you can unselect your option by making the second click on the same piece or another cell that does not complete a valid move. Any click on a cell that does not contain a movable piece will not be counted as a first click.

1.10 Connect N: Playing the game

Making a move in Connect N requires you to click on a hole where your chip can be placed. Valid moves are indicated when your mouse hovers over a column that is not full. Click the hole and then watch the chip go in!