Jakob Gruber



Contents

1	Introduction	6
2	How to Play	7
3	Game Rules, Strategies and Tips	8
	3.1 Rules	8
4	Interface Overview	9
		9
	4.2 Shortcuts	10
5	Credits and License	11

List of Tables

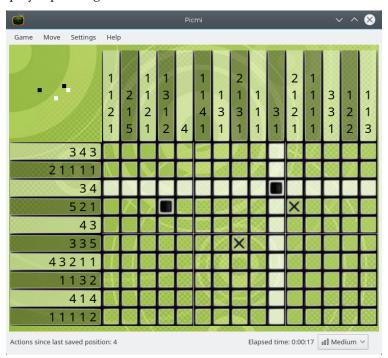
4.1	Shortcuts	10
4.2	Keyboard controls	10

Abstract

Picmi, a nonogram puzzle game.

Introduction

Picmi is a single player puzzle game.



The goal of the game is to color cells according to numbers given at the side of the board.

How to Play

The player is presented with a blank board, and a list of numbers for each row and column. These numbers represent how runs are organized within any given row or column. For example, a number sequence of '483' would mean there are sets of four, eight, and three filled cells, in that order, with at least one blank cell between successive groups. The objective of the game is to use these hints to uncover the actual solution, and do this as quickly as possible.

A left-click (un)marks a cell as occupied, while a right click (un)marks a cell as empty. Dragging may be used to mark several cells in a row or column in one go. The elapsed time is displayed in the status bar, and an overview of the game board is located in the upper left corner. A game is completed once all occupied cells have been marked correctly.

The current placement of boxes and crosses (referred to as 'states' from now on) can be saved at any time. Saving a new state does not overwrite previous saved states. Restoring a state always returns to the most recently saved state. This can be repeated until no more saved states remain. The number of actions since the latest saved state is displayed in the status bar.

Picmi includes two game modes. Random puzzles (generated by selecting the $Game \to New$ (Ctrl+N) menu item) are generated according to the selected difficulty settings. Alternatively, the included preset puzzles can be played by selecting the $Game \to Load...$ (Ctrl+O) menu item.

Game Rules, Strategies and Tips

3.1 Rules

The number sequence in a row or column provides certain information about the count of occupied cells and their arrangement within a row or column.

- A number represents the length of a connected run of occupied cells on the board. This run either has at least one empty cell on each side or is located directly on the board edge.
- Additionally, a number sequence shows the order of these runs within a row or column.
- When the **Prevent mistakes:** option is enabled, it is not possible to incorrectly mark a cell as occupied instead, penalty time is added to the timer. The penalty is increased with each mistake made.
- If **Prevent mistakes:** option is disabled, there is no feedback whether a cell has been marked correctly, and there is no penalty for making mistakes.
- The game will stop once all occupied cells have been marked correctly.

Interface Overview

4.1 Menu Items

Game \rightarrow New (Ctrl+N)

Starts a new game. It creates a random board using the current difficulty level.

$Game \rightarrow Load... (Ctrl+O)$

Loads a preset puzzle. The names of puzzles are hidden until they are solved. High score lists and difficulty settings are disabled.

Game → **Restart Game** (F5)

This will restart the current game.

$Game \rightarrow Pause (P)$

Pauses the game time. Click on the menu item again to make the game resume. Note that the board disappears when the game is paused as it would be unfair if you could search for good moves without the time pressure.

Game → Show High Scores... (Ctrl+H)

Shows a dialog containing the High Scores for the various difficulty levels.

$Game \rightarrow Quit (Ctrl+Q)$

Quits the Picmi.

$Move \rightarrow Undo \text{ (Ctrl+Z)}$

Undo the previous move if one exists.

$Move \rightarrow Hint \text{ (Ctrl+I)}$

Marks a cell as occupied or empty.

$Move \rightarrow Solve$

Play a demo game.

Move → **Load Position (Ctrl+L)**

Loads the most recently saved position.

Move \rightarrow Save Position (Ctrl+S)

Saves the current board position.

View → Full Screen Mode (Ctrl+Shift+F)

Toggles the graphic interface to full screen mode.

Settings \rightarrow Difficulty

Lets you set the difficulty level from a sub-menu.

There are four levels of difficulty:

- Easy: 10 rows, 10 columns, 55% of all cells are occupied, Prevent mistakes: option is disabled.
- Medium: 10 rows, 15 columns, 55% of all cells are occupied, Prevent mistakes: option is disabled.
- Hard: 15 rows, 15 columns, 55% of all cells are occupied, **Prevent mistakes:** option is disabled.
- Custom: Custom board dimensions and settings.

$\textbf{Settings} \rightarrow \textbf{Configure Picmi...}$

Choose the game background image, board dimensions and settings for custom difficulty.

Additionally Picmi has the common KDE **Settings** and **Help** menu items, for more information read the sections about the Settings Menu and Help Menu of the KDE Fundamentals.

4.2 Shortcuts

The default shortcuts are:

Start a new game	Ctrl+N
Load a preset game	Ctrl+O
Pause	P
Show High Scores	Ctrl+H
Full Screen Mode	Ctrl+Shift+F
Quit	Ctrl+Q
Help	F1
What's this? help	Shift+F1

Table 4.1: Shortcuts

Move Left	Left or H
Move Right	Right or L
Move Up	Up or K
Move Down	Down or J
(Un)mark cell occupied	X
(Un)mark cell free	Space

Table 4.2: Keyboard controls

Credits and License

Picmi

Program copyright 2012 by Jakob Gruber jakob.gruber@gmail.com

Documentation copyright 2012 by Jakob Gruber jakob.gruber@gmail.com

This documentation is licensed under the terms of the GNU Free Documentation License.

This program is licensed under the terms of the GNU General Public License.