The Skladnik Handbook

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Contents

Abstract

Skladnik is an implementation of the Japanese warehouse keeper game 'sokoban'.

Chapter 1

Introduction

The first sokoban game was created in 1982 by Hiroyuki Imabayashi at the Japanese company Thinking Rabbit, Inc. 'Sokoban' is Japanese for 'warehouse keeper'. The idea is that you are a warehouse keeper trying to push crates to their proper locations in a warehouse.

The problem is that you cannot pull the crates or step over them. If you are not careful, some of the crates can get stuck in wrong places and/or block your way.

It can be rather difficult just to solve a level. But if you want to make it even harder, you can try to minimize the number of moves and/or pushes you use to solve the level.

To make the game more fun for small kids (below 10 years or so), some collections with easier levels are also included in Skladnik. These are marked *(easy)* in the level collection menu. Of course, these levels can be fun for adults too, for example if you don't want to expose yourself to too much mental strain.

Chapter 2

The Game

The objective of the game is to push all the red gems to the goal squares, which are marked with green glassy round things on the floor.

Use the cursor keys or the mouse to move about. If you move onto a gem using the cursor keys or the middle mouse button, and there is nothing blocking it on the opposite side, then you will push the gem. It isn't possible to pull the gems, so if you push a gem into a corner it will be stuck there. You cannot step over the gems either, so you can also get trapped in a part of the maze by blocking the way with gems. Also note that it isn't possible to push more than one gem at a time.

If you notice that you have moved the gems in such a way that the level is impossible to solve, then you can always use the undo feature to go back to a position where the mistake has not yet been made. You can of course also restart the level from the very beginning.

2.1 Controls

Key	Action
Cursor keys	Move one square in a direction
Ctrl+**Cursor** keys	Move as far as possible in a direction without pushing any gems
Shift+**Cursor** keys	Move as far as possible in a direction, pushing any gem in the way
Left mouse button	Move to any place in the maze that can be reached without pushing any gems
Middle mouse button or **Ctrl**+**Z**	Undo the last move
Right mouse button	Move up/down/left/right in a straight line, pushing any gem in the way
Mouse wheel	Traverse the history
Ctrl+**Shift**+**Z**	Redo the last undone move
N	Go to the next level in the current level collection
P	Go to the previous level in the current level collection
Esc	Restart the current level
Ctrl+**Q**	Quit the game

2.2 Loading external levels

Skladnik has the ability to load external sokoban levels from text files. You can load levels using the **Game** → **Load Levels. . .** menu item, or by specifying the level file URL as a command line argument when starting Skladnik from a shell.

The external levels must be defined using the standard characters shown in the table below. If the file contains more than one level, the levels should be separated by blank lines. The file may also contain text between the levels.

Character	Meaning
#	Wall
(space)	Empty square
.	Goal square
$	Object on an empty square
*	Object on a goal square
@	Start position on an empty square
+	Start position on a goal square

As an example, below is a text representation of the first level in the *Microban* level collection:

```
####
#  .#
#  ###
#*@  #
#  $ #
#  ###
####
```

Chapter 3

Menu Reference

This is a complete guide to the menus of Skladnik.

3.1 The Game Menu

Game → Load Levels. . .
 Load an external level. See the section Loading External Levels for more information.

Game → Next Level (N)
 Load the next level.

Game → Previous Level (P)
 Go back to the previous level.

Game → Restart Level (Esc)
 Restart the current level.

Game → Level Collection
 A submenu to switch to a different set of levels. Skladnik comes with several level sets, and you can load more that you can find on the internet.

Game → Undo (Ctrl+Z)
 Undo the last move.

Game → Redo (Ctrl+Shift+Z)
 Redo the last move you undid with the menu item above.

Game → Quit (Ctrl+Q)
 Exit Skladnik.

3.2 The Animation Menu

This menu offers menu items with check boxes that allow you to specify the speed to which the movement replay animations are shown at.

Animation → Slow
 Show replay animations at a slow pace.

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Animation → **Medium**

    This is the default setting, and shows replay animations at a slightly faster pace.

Animation → **Fast**

    Show replay animations at the fastest pace.

Animation → **Off**

    Do not animate replay animations.

3.3   The Bookmarks Menu

Bookmarks → **Set Bookmark**

    Skladnik allows you to set bookmarks with a level at a particular state. You might use this to save yourself repeating the same initial steps in a level.

    You can have up to ten bookmarks at a time, and access them via the **Ctrl**+x shortcut, where x is any digit between 0 and 9.

Bookmarks → **Go to Bookmark**

    Jump to a state you have previously saved as a bookmark.

3.4   The Help Menu

Skladnik has the common KDE **Help** menu item, for more information read the section about the Help Menu of the KDE Fundamentals.

Chapter 4

Credits and License

Skladnik is copyright (c) 1998-2000 by Anders Widell awl@passagen.se.

The background graphics 'starfield' was taken from the Gimp. All other graphics were created by Anders Widell awl@passagen.se using the Povray ray tracer.

All the currently included sokoban levels were created by David W. Skinner sasquatch@bentonrea.com. See his sokoban page.

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