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Abstract

This documentation describes the game of Ksudoku version $0.5\,$

Introduction

GAMETYPE: Logic, Board

NUMBER OF POSSIBLE PLAYERS: One

Ksudoku is a logic-based symbol placement puzzle.

The player has to fill a grid so that each column, row as well as each square block on the game field contains only one instance of each symbol.

Depending on the preferences and the difficulty level some games start with a partially completed game field, while the others start with a blank one.

There are hundreds of different variations of sudoku in existence. The most common variant of the game has a 9x9 squares grid and uses Arabic numerals for symbols. As an extra constraint, the grid is divided into 9 sectors of 3x3 squares. The problem is – each symbol can only be used once per row, column and sector.

NOTE:

It takes a lot of time and concentration to complete each game. However, solving sudoku puzzles helps to increase the overall brain activity and therefore is highly recommended.

How to Play

OBJECTIVE:

Fill the grid so that each column, row as well as each square sector on the game field contains only one instance of each symbol.

At the game start you are prompted to choose which game type you are interested in.

NOTE:

The game experience may change slightly depending on the game type you choose.

Take a look at left hand side of the game field. There is a selection list which contains all the symbols available for you to use in the current game.

NOTE:

The set of symbols varies depending on the game type you choose.

First, note the boundaries of the game field. The thick black lines outline the sectors. Every one of this sectors has to be completed using the symbols available, in such a way that each symbol is used within the sector area once and only once.

Now you can start entering the symbols into the vacant squares on the game field. You can do that by selecting the symbol you wish to enter from the selection list on the left , and then using your mouse to click on the vacant square on the game field.

Notice that the squares change color while you hover your mouse over them. It is done to help you keep up with the rules of Ksudoku. Use the vertical and horizontal lines to check if the symbol, you are about to enter into the vacant spot, is already in use anywhere in the vertical or horizontal line that square is a part of. The coloring also highlights the sector which, if you remember, must also contain only one instance of each symbol.

Keep entering the symbols in accordance with the riles until the whole game field is filled up. At this pint the application will check if all the entries are valid and either correct you, or except the solution.

Game Rules, Strategies and Tips

3.1 General Game Rules

The rules of Ksudoku are quite simple.

- Depending on the size of the game board and the difficulty level chosen each individual Ksudoku puzzle may take up to a few hours to solve.
- Each square may hold one and only one symbol.
- Each horizontal row (as defined by the game board) can contain each symbol exactly once.
- Each vertical row (as defined by the game board) can contain each symbol exactly once.
- Each subgrid or section (as defined by the game board) can contain each symbol exactly once

NOTE:

The set of symbols varies depending on the game type you choose.

- Knowledge of mathematics, or language is not required to solve Ksudoku puzzles.
- Depending on the difficulty chosen the puzzles may appear partially solved. In such case the signs already on the game board cannot be changed.
- You can only modify the symbols you have previously entered.
- Ksudoku generated puzzles have one solution only.

3.2 Strategies and Tips

- Take your time and do not rush. Ksudoku is not a 'quick' game to play.
- Pay attention to the row, column, and section colorings. They are here to aid you in the game.
- Make sure that so duplicate symbol exists already in the row/column/section you are entering it to.
- If in doubt, try to foresee if a square you are entering a symbol into maybe needed by some other symbol, which otherwise cannot go anywhere else due to the row/column/section rule violation.
- If you are having troubles, try to retrace your steps and see exactly where you have made an error.
- Even though Ksudoku provides a 'Hint' option for you, try not to use it often. Remember solving the puzzle all by yourself enhances your brain activity, while using the 'Hint' feature too often is cheating.
- If you have much trouble solving a certain puzzle, and simply must use the 'Hint' feature, then maybe you should try to decrease the difficulty level, or try a simpler, more basic puzzle.
- Some puzzle layouts feature very specific game board shapes. It is a good idea to have the coloring option enabled even if you consider yourself an experienced player.

Interface Overview

4.1 The Game Menu

 $Game \rightarrow New (Ctrl+N)$ Starts a new game.

Game → **Load...** (Ctrl+O) Loads a saved game.

Game → **Save (Ctrl+S)** Saves the current game as a default save file.

Game → **Save As...** Saves the current game as a file of your choice.

Game → Quit (Ctrl+Q) Quits Ksudoku.

4.2 The Move Menu

 $Move \rightarrow Undo (Ctrl+Z)$ Undo your last move.

 $Move \rightarrow Redo$ (Ctrl+Shift+Z) Redo a move that was undone.

Move → **Hint** (**H**) Gives a Hint by flashing a matching pair of tiles.

Move \rightarrow **Solve** Instantly solve the puzzle.

Move → **Check** Check the entry for validity.

4.3 The Settings Menu

 $\textbf{Settings} \rightarrow \textbf{Toolbars} \rightarrow \textbf{Main Toolbar} \ \ \text{Shows or hides the Main Toolbar}.$

- **Settings** \rightarrow **Toolbars** \rightarrow **Actions Toolbar** Shows or hides the Actions Toolbar.
- **Settings** → **Show Statusbar** Shows or hides the Statusbar.
- **Settings** → **Configure Shortcuts...** Displays a standard KDE shortcut configuration dialog to change the keyboard shortcuts for Ksudoku.
- **Settings** → **Configure Toolbars...** Displays a standard KDE dialog where you can configure the toolbar icons.
- **Settings** → **Configure Ksudoku...** Opens a dialog to configure Ksudoku. See Game Configuration section for details.

4.4 The Help Menu

Ksudoku has a default KDE Help menu as described below, with one addition:

 $\mathbf{Help} \rightarrow \mathbf{Home}$ Page Opens the Ksudoku website on sourceforge.net in Konqueror.

The default KDE Help entries are:

- Help → Ksudoku Handbook (F1) Invokes the KDE Help system starting at the Ksudoku help pages. (this document).
- Help → What's This? (Shift+F1) Changes the mouse cursor to a combination arrow and question mark. Clicking on items within Ksudoku will open a help window (if one exists for the particular item) explaining the item's function.
- **Help** → **Report Bug...** Opens the Bug report dialog where you can report a bug or request a 'wishlist' feature.
- **Help** → **About Ksudoku** This will display version and author information.
- $Help \mathop{\rightarrow} About \; KDE$ This displays the KDE version and other basic information.

Frequently asked questions

1. Who made this game?

The kdegames team. You can find their website here.

2. Where can I get cheatcodes?

You cannot get cheatcodes for KDE games.

3. How do I start a new game?

To start a new game use Game \rightarrow New (Ctrl+N) on the menubar or click the New button on the toolbar.

4. How do I pause the game?

Ksudoku does not have a 'Pause' feature.

5. I want to change the way this game looks. Can I?

Sudoku games are traditionally played using square grid. Themes would not make much sense here. However, you can select the set of symbols used in game. To do so use Settings → Configure Ksudoku... on menubar.

6. I changed the symbols in the configuration dialog and now my entire game board is filled with question marks. What is the problem?

Each set contains a limited number of possible symbols. If you have chosen the set which has less symbols then your current game requires, the application will complain by displaying question marks. Change the set to fix the problem.

7. I have made a mistake. Can I undo?

Yes. To undo use Move \rightarrow Undo (Ctrl+Z).

8. Can I use keyboard?

Yes. In Ksudoku keyboard play is always enabled. Please use cursor keys to move the selection, numeric characters to enter the symbols and **Shift** key to apply markers.

- 9. *I cannot figure out what to do here! Are there hints?*Yes. To access 'Hint' feature use Move → Hint (H) on the menubar.
- 10. *I have to quit the game now, but I am not finished yet. Can I save my progress?* Yes. To access 'Save' feature use Game \rightarrow Save (Ctrl+S) on the menubar.
- 11. Where are the high scores?

 Ksudoku does not have this feature.
- 12. I want to change the game configuration. Where do I go?
 To access the game settings use Settings → Configure Ksudoku... on the menubar. See the Game Configuration section for details.

Game Configuration

6.1 Game Options

Show Highlights Toggle the Ksudoku highlight option.

NOTE:

Having this option enabled is recommended even for the most experienced players, as it helps to see the actual game board constraints.

Show Errors Toggle the invalid entry highlight.

6.2 Symbol Themes Options

Simple Forms Toggles on and off the use of simple forms for the ingame pictograms.

Dices Toggles on and off the use of dice for the ingame pictograms.

Digits Toggles on and off the use of Arabic numerals for the ingame pictograms.

Small Letters Toggles on and off the use of small Latin letters for the ingame pictograms.

Capital Letters Toggles on and off the use of capital Latin letters for the ingame pictograms.

Note:

Each set contains a limited number of possible symbols. If you have chosen the set which has less symbols then your current game requires, the application will complain by displaying question marks. Change the set to fix the problem.

Credits and License

Ksudoku

Ksudoku copyright 2005-2007 Francesco Rossi redsh@email.it

Copyright 2006-2007 Mick Kappenburg ksudoku@kappenburg.net, Johannes Bergmeier johannes.bergmeier@gmx.net

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Appendix A

Installation

Ksudoku is part of the KDE project http://www.kde.org/.

Ksudoku can be found in the kdegames package on ftp://ftp.kde.org/pub/-kde/, the main FTP site of the KDE project.

A.1 Compilation and Installation

In order to compile and install Ksudoku on your system, type the following in the base directory of the Ksudoku distribution:

```
% ./configure
% make
% make install
```

Since Ksudoku uses **autoconf** and **automake** you should have no trouble compiling it. Should you run into problems please report them to the KDE mailing lists.