picpuz user guide   v.06

Introduction

Picpuz is a computer "jigsaw puzzle". You can take almost any image file and break it into pieces which you can then reassemble using the mouse. You can control the puzzle size and number of pieces (tens to thousands).

Installation

The following procedure is illustrative only. Many variations are possible.

```
01. download the tarball: picpuz.xxx.tar.gz
02. choose a directory (this example: /usr/picpuz)
03. $ su root                            # get root privileges
04. $ mkdir /usr/picpuz                  # create directory
05. $ mv picpuz.xx.tar.gz /usr/picpuz    # move tarball into directory
06. $ cd /usr/picpuz                     # change to directory
07. $ tar -xzf picpuz.xx.tar.gz          # unpack tarball in directory
08. $ ./picpuz-build.sh                  # rebuild executable
09. $ chown root:root *                  # set root owner for all files
10. $ chmod o+x picpuz.x                 # allow all users to run picpuz.x
```

The executable should now be available for any user: `$ /usr/picpuz/picpuz.x`

The executable may run without rebuilding if your Linux system has compatible libraries. If it does not run, use the build script (as shown above) to build a compatible version for your system. Recent versions of the Gnu C++ compiler and GTK2 libraries are required. If either is missing, look in your package manager for `g++` and `libgtk2.0-dev`. They should be available, even if you are using the KDE desktop. If the above names don't work, search for packages containing the files `/usr/bin/g++` and `/usr/lib/libgtk-x11-2.0`

Files included in the distribution:

```
picpuz.cpp            application source code
zlib.cpp              collection of GTK and utility functions
zlib.h                c++ header file
picpuz.x              executable file
picpuz-build.sh       shell script to build the executable
picpuz-guide.pdf      user guide and help file (this file)
picpuz-maketar.sh     shell script to make tar distribution file
```

License and Warranty

Picpuz is a free program licensed under the GNU General Public License, version 2 (Free Software Foundation). Picpuz is not warranted for any purpose, but if you find a bug or have a suggestion, please tell me: `mikecorn@arcor.de`

Primer
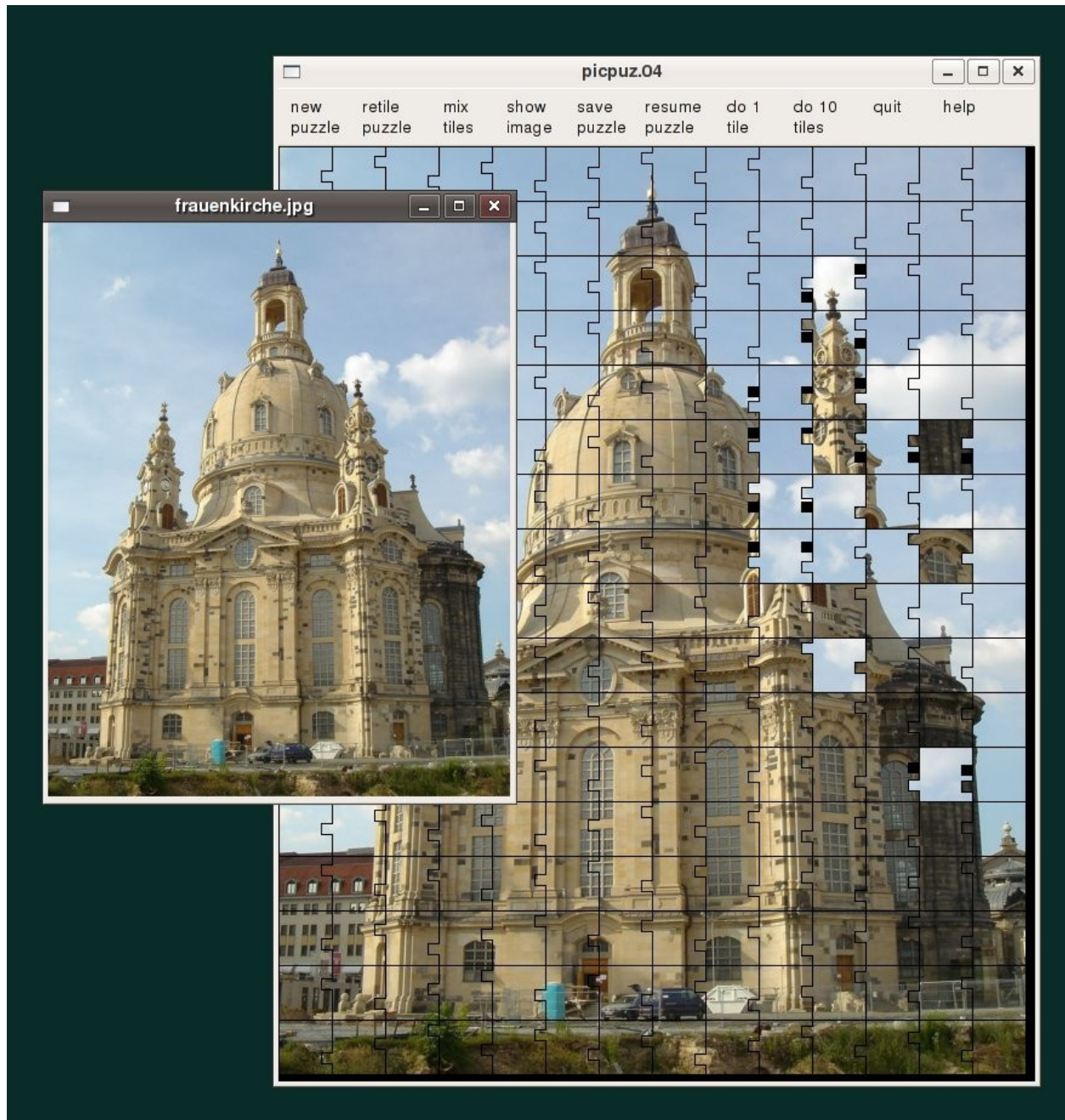
The buttons along the top of the window are arranged in a typical sequence of use.

new puzzle	Open an image file to make a new puzzle. Most image files will work OK.
retile puzzle	Break the image into tiles or puzzle-pieces.
mix tiles	The tiles are mixed-up in a random manner.
show image	Show the finished picture in a separate window. Use this for guidance.
save puzzle	Save a partially completed puzzle to a file for later resumption.
resume puzzle	Load a saved puzzle from a file and resume working on it.
do 1 tile	One tile is chosen at random and placed in its home position.
do 10 tiles	Ten tiles are chosen at random and placed in their home positions
quit	Exit the application
help	Display the help file (this file).

The **retile** button allows you to set the tile size, in pixels. Use a smaller value to make more tiles and a more difficult puzzle. After using the **mix** button, the puzzle is ready to be worked on. Use the left **mouse** button to click on any two pieces in sequence: they will be exchanged. When you move a tile into a new position, the tile that was there is moved to the position that was vacated. The **do 1** and **do 10** buttons can be used to cheat a little. The right mouse button can be used to find the right tile for the position clicked.

Adding picpuz to Gnome menu:

The following procedure will create a Gnome menu entry for picpuz, under the category "Game". This is for a single user. For multiple users, follow the Gnome system administration guidelines.

- create the following text file:

```
[Desktop Entry]
Version=1.0
Encoding=UTF-8
Name=picpuz
Comment=digital image enhancement
Exec=/usr/picpuz/picpuz.x
Terminal=false
Type=Application
Categories=Game
```

- input the correct "Exec=" pathname
- save the file as: ~/.local/share/applications/picpuz.desktop
  (since .local is hidden, you may have to type-in the whole pathname)

Change Log

2007.01.15 v.06 added icons to toolbar buttons

2006.12.21 v.05
  •   new button: change tile borders: black → white → dotted lines
      (improve visibility with dark backgrounds)

2006.12.17 v.04
  •   corrected bug: program did not exit when window destroyed via "x" button
  •   new feature: puzzle tiles are more like classic jigsaw puzzles
  •   new feature: status bar tracks progress

2006.11.30 v.03
  •   added tool tips to toolbar buttons

2006.11.28 v.02
  •   add function: right mouse finds home tile for selected tile position

2006.11.24 v.01 initial release
  •   arbitrary tileing of selected image file
  •   arbitrary window resize, retaining tiles
  •   random mixing of tiles
  •   separate viewing window for guidance image
  •   exchange tiles with mouse clicks
  •   save unfinished puzzle and resume later
  •   cheat buttons
  •   help function