

# **The KTuberling Handbook**

**Éric Bischoff, Paul E. Ahlquist, Jr., and Lauri Watts**



# The KTuberling Handbook

# Contents

<b>1</b>	<b>Introduction</b>	<b>1</b>
<b>2</b>	<b>On Screen Fundamentals</b>	<b>2</b>
2.1	Mouse Operation . . . . .	2
2.1.1	Placing an Object . . . . .	3
2.1.2	Moving an Object . . . . .	3
2.1.3	Removing an Object . . . . .	3
2.2	The Tool Bar . . . . .	3
2.3	The Menu Items . . . . .	3
2.3.1	The Game Menu . . . . .	5
2.3.2	The Edit Menu . . . . .	5
2.3.3	The Playground Menu . . . . .	6
2.3.4	The Speech Menu . . . . .	7
2.3.5	The Settings Menu . . . . .	8
2.3.6	The Help Menu . . . . .	8
<b>3</b>	<b>Technical reference</b>	<b>10</b>
3.1	For artists . . . . .	10
3.2	Translation . . . . .	11
3.3	For programmers . . . . .	11
3.3.1	C++ classes . . . . .	11
3.3.2	.tuberling files structure . . . . .	12
3.4	Structure of the layout file (layout.xml) . . . . .	12
<b>4</b>	<b>Credits and License</b>	<b>13</b>

## The KTuberling Handbook

<b>A Installation</b>	<b>14</b>
A.1 How to obtain ktuberling . . . . .	14
A.2 Requirements . . . . .	14
A.3 Compilation and Installation . . . . .	14
<b>B Index</b>	<b>15</b>

# List of Tables

2.2	Toolbar Buttons . . . . .	4
-----	---------------------------	---

### **Abstract**

KTuberling is a game intended for small children.

## Chapter 1

# Introduction



KTuberling is a game intended for small children. Of course, it may be suitable for adults who have remained young at heart.

It is a 'potato editor'. That means that you can drag and drop eyes, mouths, mustache, and other parts of face and goodies onto a potato-like guy. Similarly, you have a penguin and an aquarium on which you can drop other stuff.

There is no winner for the game. The only purpose is to make the funniest faces you can.

There is a museum (like a 'Madame Tousseau' gallery) where you can find many funny examples of decorated potatoes, penguins and aquariums. Of course, you can send your own creations to the programmer, [Éric Bischoff](#), who will include them in the museum if he gets some spare time.

KTuberling can also 'speak'. It will spell out the name of the objects you drag and drop. It will 'speak' in a language that you can chose. You can even use it to learn a bit of vocabulary in foreign languages. Currently, KTuberling can 'speak' Danish, German, English, Spanish, French, Italian, Dutch, Portuguese, Romanian, Serbian, Slovak, Slovenian and Swedish.

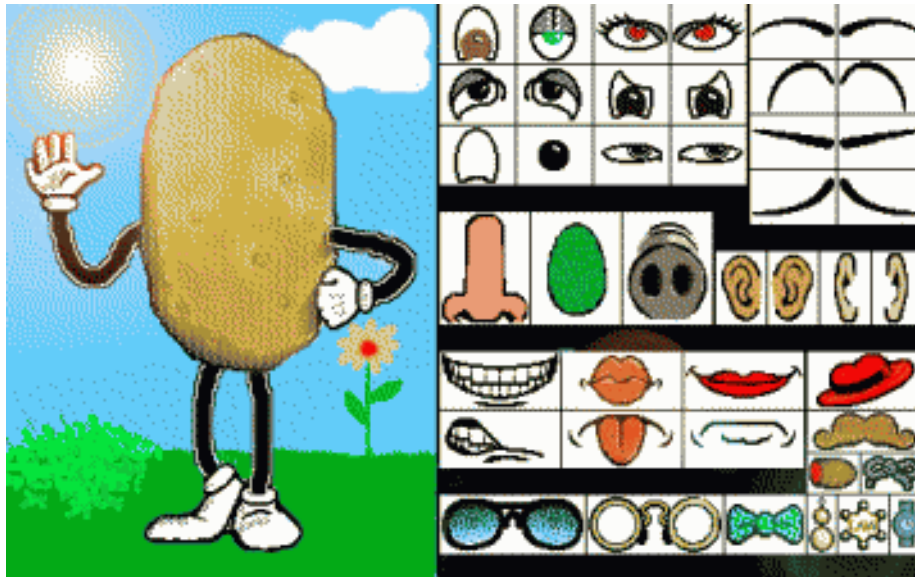
## Chapter 2

# On Screen Fundamentals

### 2.1 Mouse Operation

There are two areas in the main window:

- 'Playground' area, on the left side.
- 'Objects' area, on the right side, where you select objects to place on your playground.



### 2.1.1 Placing an Object

To drag an object, move the mouse pointer to the 'objects' area on the right. Click on the object you want to drag, but do not release the mouse button until you have moved the mouse pointer to the location in the 'playground' area where you want to drop the object.

### 2.1.2 Moving an Object

Once dropped in the 'playground' area, an object can be moved. Just click on the object to select it for further drag and drop. When you click on it, it goes on top of other objects that were partially hiding it. This trick is useful for getting the glasses and eyes placed correctly.

### 2.1.3 Removing an Object

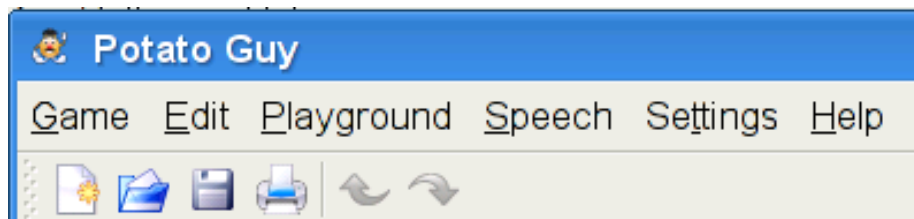
To remove an object that has been dropped in the 'playground' area, drag it back from the 'playground' area to the 'objects' area.

## 2.2 The Tool Bar



The toolbar provides buttons for the commonly used functions.

## 2.3 The Menu Items



The KTuberling Handbook







Button	Name	Menu Equivalent	Action
	New	GameNew	Resets the 'playground' area. This cleans all parts off the playground so a new decoration may be created.
	Load	GameLoad...	Opens an existing tuberling file from the museum or from other folders.
	Save	GameSave	Saves your creation to your home folder, or to some other folder like the museum if you wish. The tuberling is saved to a small file where only the position of objects are saved.
	Print	GamePrint	Prints your picture (PostScript® format).
	Undo	EditUndo	Undoes last operation.
	Redo	EditRedo	Re-does last operation.

Table 2.2: Toolbar Buttons

### 2.3.1 The Game Menu



**Game** → **New (Ctrl+N)** Clears the 'playground' area

**Game** → **Load... (Ctrl+O)** Opens an existing tuberling file from the museum or from somewhere else if you wish.

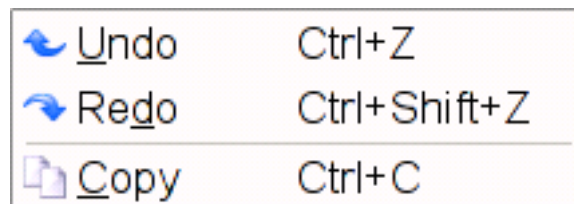
**Game** → **Save (Ctrl+S)** Saves your creation. The tuberling is saved to a small file where only the position of objects are saved.

**Game** → **Save as Picture...** Creates a graphics file containing a picture of your tuberling. Available file formats are XPM, JPEG, PNG and BMP.

**Game** → **Print... (Ctrl+P)** Print your tuberling picture using PostScript® format.

**Game** → **Quit (Ctrl+Q)** Quit KTuberling.

### 2.3.2 The Edit Menu

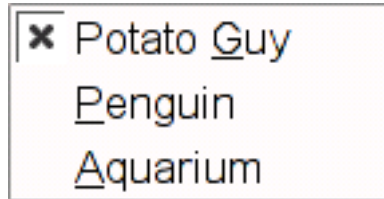


**Edit** → **Undo (Ctrl+Z)** Undo the last 'object' placement.

**Edit** → **Redo (Ctrl+Shift+Z)** Re-does the last 'object' placement. This menu option is active only if you have previously used Undo.

**Edit** → **Copy (Ctrl+C)** Copy the 'playground' area to the clipboard.

### 2.3.3 The Playground Menu



**Playground** → **Potato Guy** Switches to potato playground. KTuberling remembers the last chosen playground the next time it starts up.

**Playground** → **Penguin** Switches to penguin playground. KTuberling remembers the last chosen playground the next time it starts up.

**Playground** → **Aquarium** Switches to aquarium playground. KTuberling remembers the last chosen playground the next time it starts up.

### 2.3.4 The Speech Menu



Please note that you need to have `kdemultimedia` installed and `artsd` running to be able to hear sounds.

**Speech** → **No Sound** Toggles sound off. KTuberling remembers of this option the next time it starts up.

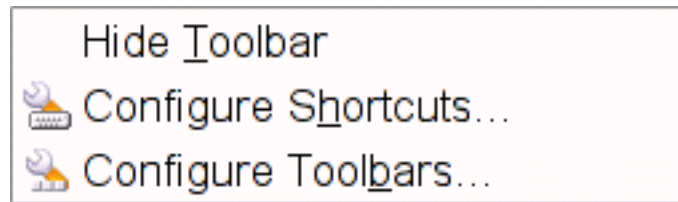
**Speech** → **Danish** Toggles sound on and speaks Danish. If Danish sounds are not installed then this option is grayed out. KTuberling remembers of this option the next time it starts up.

**Speech** → **German** Toggles sound on and speaks German. If German sounds are not installed then this option is grayed out. KTuberling remembers of this option the next time it starts up.

**Speech** → **English** Toggles sound on and speaks English. If English sounds are not installed then this option is grayed out. KTuberling remembers of this option the next time it starts up.

etc... Same for the other languages.

### 2.3.5 The Settings Menu

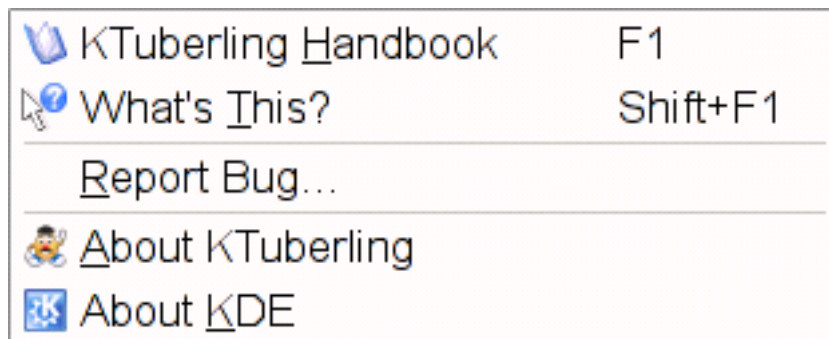


**Settings** → **Show/Hide Toolbar** Toggle the Toolbar display on and off.

**Settings** → **Configure Shortcuts...** Opens a standard KDE shortcut configuration dialog, where you can change the keyboard shortcuts used by KTuberling.

**Settings** → **Configure Toolbars...** Display the standard KDE toolbar configuration dialog.

### 2.3.6 The Help Menu



**Help** → **KTuberling Handbook (F1)** Invokes the KDE Help system starting at the KTuberling 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 KTuberling will open a help window (if one exists for the particular item) explaining the item's function.

## The KTuberling Handbook

**Help** → **Report Bug...** Opens the Bug report dialog where you can report a bug or request a 'wishlist' feature.

**Help** → **About KTuberling** This will display version and author information.

**Help** → **About KDE** This displays the KDE version and other basic information.

## Chapter 3

# Technical reference

Éric Bischoff 2006-05-05 0.05.01 KTuberling offers a gentle and rewarding introduction to KDE customization and programming. The application can be extended. For example, without any coding, new playgrounds can be added by changing the graphics files. By adding appropriate sound files, translators can change the sounds to their native tongue!

If you extend or add to the game please consider sending your additions to the developer [Éric Bischoff](#) for inclusion in future releases.

### 3.1 For artists

The size and shape of the playground and the number of objects can be changed. New playgrounds can be added. Only two image files need to be created for each playground: a gameboard and a mask. A maximum of 8 playgrounds is allowed, out of which only 3 are currently used.

Six images are used in KTuberling: `potato-game.png`, `potato-mask.png`, `penguin-game.png`, `penguin-mask.png`, `aquarium-game.png` and `aquarium-mask.png`. The standard location for these files is the folder `$KDEDIR/share/apps/ktuberling/pics/`.

The first type of images, `*-game.png` holds the playground and the objects that the user selects. This is the graphic that the user sees when playing the game.

The second type of images, `*-mask.png`, contains only masks of the objects. The masks are used to delimit the borders of the objects and, in some cases, give the object some transparency (for example, the spectacles). It is mandatory to put the objects at the same position in the gameboard file as in the mask file.

In the same folder, a file named `layout.xml`. (`$KDEDIR/share/apps/ktuberling/pics/layout.xml`) tells which images to use and links them to menu entries. It also contains the position parameters of the playground and the objects in the gameboard and in the masks. It assigns the sounds to objects and places

## The KTuberling Handbook

the objects in groups. It finally declares languages as sets of translated sounds. It follows standard XML syntax (see details [below](#)).

Still in the same folder, a file named `layout.i18n` (`$(KDEDIR)/share/apps/ktuberling/pics/layout.xml`) recapitulates the strings in `layout.xml` that can be translated:

- The menu entries that allow to choose the playground and the language
- The names of the categories of objects

One folder above, a file named `ktuberlingui.rc` (`$(KDEDIR)/share/apps/ktuberling/ktuberlingui.rc`) is a second XML file describing the menus of KTuberling. It should contain one `<action>` tag per playground and language. The symbolic name of the action in this file should be identical to the symbolic name of the action in `layout.xml`.

### 3.2 Translation

Besides the usual `.po` files mechanism for translating program labels and prompts, the sounds can be localized too.

If the various translators can record their voice to a `.wav` file, they can store that file to the language-specific subfolder of the sounds folder. The name of the sound is then assigned to a file in the `layout.xml` file. For example, if destination language is Italian, translators can record their voice in `.wav` files located in `$(KDEDIR)/share/apps/ktuberling/sounds/it`. Then they can assign the sound named 'hat' to the filename `it/cappello.wav`.

In a future release, KTuberling will use OGG Vorbis rc3 file format for sounds. At that moment, it will be possible to convert the WAV files to OGG Vorbis rc3 through the following command line:

```
$ oggenc -q 10 -o sound.ogg sound.wav
```

Information on how to work with the translation mechanisms in KDE is available in [The KDE Translation HOWTO](#).

### 3.3 For programmers

KTuberling isn't really difficult to extend for programmers.

#### 3.3.1 C++ classes

**TopLevel1** Top-level window and basic program management

**PlayGround** Description of one of the game levels

**ToDraw** Description of one of the graphical 'objects' to be drawn

**SoundFactory** Description of one of the languages and its sounds

**Action** One of the user's manipulation in the undo/redo stack

### 3.3.2 .tuberling files structure

A `.tuberling` file holds all the necessary data to redraw a tuberling. It can be edited with an ordinary text editor.

The first line holds the number of the playground.

On all other lines, there is one graphical object per line, in the order that is used to draw them. Each line contains 5 numbers: the identifier of the object, and the rectangle where it should be drawn (left, top, right, bottom). The numbers are separated by whitespaces.

## 3.4 Structure of the layout file (`layout.xml`)

The top-level tag is unique and is named `<ktuberling>`. It contains several `<playground>` tags, one per playground, and several `<language>` tags, one per language.

The `<playground>` tag has two attributes: `gameboard` and `masks`. These attributes give the name of the files holding the pictures. The `<playground>` tag also contains one `<menuitem>` tag, one `<editablearea>` tag, several `<category>` tags, and several `<object>` tags.

The `<menuitem>` tag describes the action identifier of the menu item allowing to select position of the area where you can drop objects, and the label of this menu item. This action identifier should be identical to the one in `ktuberlingui.rc`.

The `<editablearea>` tag describes the position of the area where you can drop objects, and the name of the sound associated with it.

The `<category>` tag describes the position and the label of a text describing a group of objects. For example, it can describe the position and the text of the group of 'goodies'.

The `<object>` tag describes the position (in the gameboard and in the masks) of an object, as well as the name of the sound associated with it.

The `<language>` tag has one attribute: `code`. This attribute give the code of the locale for that language. The `<language>` tag also contains one `<menuitem>` tag and several `<sound>` tags.

The lower level tags are not explained here, since their meaning is quite straightforward. If you modify `layout.xml`, don't forget to modify `layout.i18n` and `ktuberlingui.rc` accordingly.

## Chapter 4

# Credits and License

KTuberling

- John Calhoun - Original idea, original pictures and English sounds
- Éric Bischoff [e.bischoff@noos.fr](mailto:e.bischoff@noos.fr) - KDE Programming
- François-Xavier Duranceau [duranceau@free.fr](mailto:duranceau@free.fr) - Tests, advice and help
- Agnieszka Czajkowska [agnieszka@imagegalaxy.de](mailto:agnieszka@imagegalaxy.de) - Penguin graphics
- Bas Willems [next@euronet.nl](mailto:next@euronet.nl) - Graphics reworks and aquarium theme
- Roger Larsson [roger.larsson@norrان.net](mailto:roger.larsson@norrان.net) - Sounds tuning
- Dolores Almansa [dolores.almansa@corazondemaria.org](mailto:dolores.almansa@corazondemaria.org) - Educative graphics for COR-EDUX initiative
- Peter Silva [peter.silva@videotron.ca](mailto:peter.silva@videotron.ca) - Proofreading of the documentation
- Paul Ahlquist [pea@ahlquist.org](mailto:pea@ahlquist.org) - Bettering of documentation

This game is dedicated to my little daughter Sunniva Bischoff

Thanks to Apple Computer and to the LinuxPPC™ project for having made ports of Linux® to the Mac®. KTuberling would never have existed without that!

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](#).

# Appendix A

## Installation

### A.1 How to obtain ktuberling

KTuberling is part of the KDE project <http://www.kde.org/> .

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

### A.2 Requirements

In order to successfully compile KTuberling, you need KDE 3.5. All required libraries as well as KTuberling itself can be found on <ftp://ftp.kde.org/pub/kde/> .

To be able to hear the sounds, you need to have kdemultimedia installed.

### A.3 Compilation and Installation

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

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

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

## Appendix B

# Index

**K**  
KDE, 10  
KTuberling, 10

**T**  
technical reference, 10