

GTK+ (GIMP Toolkit) is a cross-platform widget toolkit for creating graphical user interfaces. It is one of the most popular toolkits for the X Window System, along with Qt.

GTK+ was initially created for the GNU Image Manipulation Program (GIMP), a raster graphics editor, in 1997 by Spencer Kimball and Peter Mattis, members of eXperimental Computing Facility (XCF) at University of California, Berkeley.

GTK+ is licensed under the LGPL free software license and is part of the GNU Project, which aims to create a whole free-software operating system.

Design

GTK+ is an object-oriented widget toolkit written in the C programming language; object-orientation is achieved by using the GLib object system. On the X11 display server, GTK+ uses Xlib to draw widgets. Using Xlib provides flexibility and allows GTK+ to be used on platforms where the X Window System is unavailable. While GTK+ is primarily targeted at the X Window System, other platforms are supported, including Microsoft Windows, DirectFB and Quartz on Mac OS X.

GTK+ can be configured to change the look of the widgets drawn; this is done using different display engines. Several display engines exist which try to emulate the look of the native widgets on the platform in use

Future developments

Project Ridley is an attempt to consolidate several libraries that are currently external to GTK+, including libgnome, libgnomeui, libgnomeprint22, libgnomeprintui22, libglade, libgnomecanvas, libegg, libeel, gtkglext and libsexy.

Developers are also considering new directions for the library, including removing deprecated API components and adding an integrated scene graph system, similar to the Clutter graphics library, effectively integrating GTK+ with OpenGL.

Development and design of the GTK+ 3 release of the toolkit started in February 2009 during the GTK+ Theming Hackfest held in Dublin. A first draft of the development roadmap has been released on April 9, 2009.