Geeonx for Linux

Introduction and Installation

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I. Introduction:

Geeonx in three sentences:

Geeonx is a window system.

Geeonx is a Grahpical User Interface (GUI).

Geeonx is a shared library.

What do I need to use Geeonx ?

An x86 computer with a 64 bit processor running a Linux operating system.

The shared libraries

SDL 2 (https://www.libsdl.org)

SDL_ttf 2 (https://www.libsdl.org/projects/SDL_ttf)

SDL_image 2 (https://www.libsdl.org/projects/SDL_image/)

What are the benefits of Geeonx ?

Geeonx runs on the basis of SDL (Simple Direct Media Layer). Geeonx is the ideal GUI for Linux to build applications running on Linux and MacOS using only one C sourcecode.

With the tool Geeonx Creator you are able to design all GUI-elements like

windows, buttons and icons. Geeonx stores the data of each and every GUI element in a corresponding Geeonx object.

Geeonx Creator will store the GUI data into a *.gee and *.gew file and the Geeonx shared library take over all drawings of GUI elements (inclusive window content) and do all window and button management. Hence it is very easy to program applications with windows, buttons and icons.

For example to alter the content of a window you just change the text_string within the structure of the Geeonx_object. With the call of the function gee_draw_all_objects() the whole interface of the application will be updated.

For those who want to learn to code with Geeonx, look at Geeonx_Create.pdf.

II. License and Copyright:

This little introduction accompanies Geeonx.

III. Install Geeonx on your Linux computer:

1. Install SDL libraries

First check if the SDL libraries are installed. If not, download them and install them:

On Debian-based systems use terminal to execute

sudo apt-get install libsdl2-dev

sudo apt-get install libsdl2-image-dev

sudo apt-get install libsdl2-ttf-dev

Of course you can download the sources and do:

./configure

make

make install.

2. Prepare directories

We want to use the directories /usr/local/lib, /usr/local/include, /usr/local/bin and usr/share/applications. These directories are normally owned by root. Hence, it is necessary to change the ownership to you.

Open terminal, type sudo -i and enter passphrase.

chown <yourname> /usr/local/lib

chmod u+rwx /usr/local/lib -R

chown <yourname> /usr/local/include

chmod u+rwx /usr/local/include -R

chown <yourname> /usr/local/bin

chmod u+rwx /usr/local/bin -R

chown <yourname> /usr/share/applications.

chmod u+rwx /usr/local/share/applications -R

2. Copy files

(a) Decompress geeonx_pac.tar.gz in the folder usr/local/bin.

(b) You should receive /usr/local/bin/geeonx.

(c) Copy libgeeonx.so to usr/local/lib.

(e) Execute ldconfig to update library database.

(d) Copy geeonx_public.h to usr/local/include.

(d) Move with cd into /usr/local/bin/geeonx.

(e) You can run geeonx_demo by ./geeonx_demo or geeonx_creator by ./geeonx_creator.

(f) Copy to GeeonxCreator.desktop file to /usr/share/applications. After that you can launch geeonx_creator or by clicking on the Geeonx logo in your launch menu.

That’s it.

Keep in mind that the *.gee, *.gee, font and gfx files must be in the same directory as the Geeonx applications.

IV. Litte introduction into the Geeonx interface:

Geeonx offers pulldown-menus and buttons as you already know from other interfaces. The Geeonx windows differ a little from other interfaces. All buttons to operate the window are placed above the top of the window. Furtermore the selected window is marked with a little colored box (selected_box) and a colored outline around the window.

These are the window operators:

The **Close-Operator** will close the window.

The **Move-Operator** enables you to move the window. With a click on this operator you enable window-movement. With next click on the screen you will chose the new screen position of the window.

The **Arrows** enables you to change the size of the window or to move the content of the window, depending on size or scroll modus is activated.

With the **Switch-operator** you can switch between size and scroll_modus. Once you have clicked on this operator, the color of the window selected_box and the outline changes.

V. Thanx:

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Rasmus J. N. Keller 02.09.2019