

\*\*\*\*\*Draft\*\*\*\*\*

***Nuklear Library Testing Rpi4 4gb***

***08/12/20***

\*\*\*\*\*Draft\*\*\*\*\*

## Appendix A Notes demo-test

```
devel@mypi3-20:~/nuklear/demo/x11_opengl2 $ bin/demo
[X11] Failed to create OpenGL 3.0 context
[X11] ... using old-style GLX context!
Major chg in demo when the Makefile is modified.
-CFLAGS += -std=c99 -pedantic -O2
+CFLAGS += -std=c99 -pedantic -O2 -DINCLUDE_ALL
```

In main.c

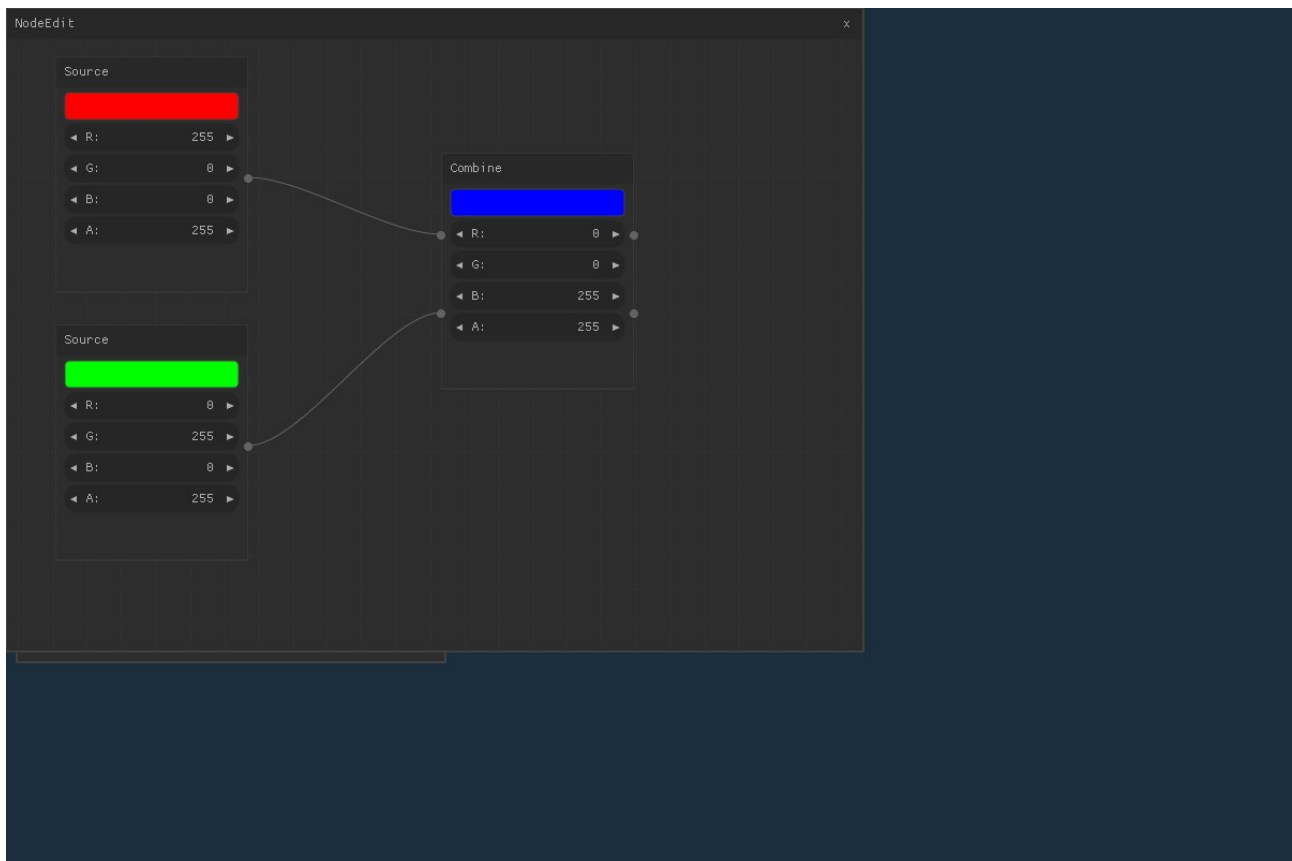
```
/* This are some code examples to provide a small overview of what can be
 * done with this library. To try out an example uncomment the defines */
```

```
#ifdef INCLUDE_ALL
#define INCLUDE_STYLE
#define INCLUDE_CALCULATOR
#define INCLUDE_OVERVIEW
#define INCLUDE_NODE_EDITOR
#endif
```

```
#ifdef INCLUDE_STYLE
#include "../style.c"
#endif
#ifdef INCLUDE_CALCULATOR
#include "../calculator.c"
#endif
#ifdef INCLUDE_OVERVIEW
#include "../overview.c"
#endif
#ifdef INCLUDE_NODE_EDITOR
#include "../node_editor.c"
#endif
```

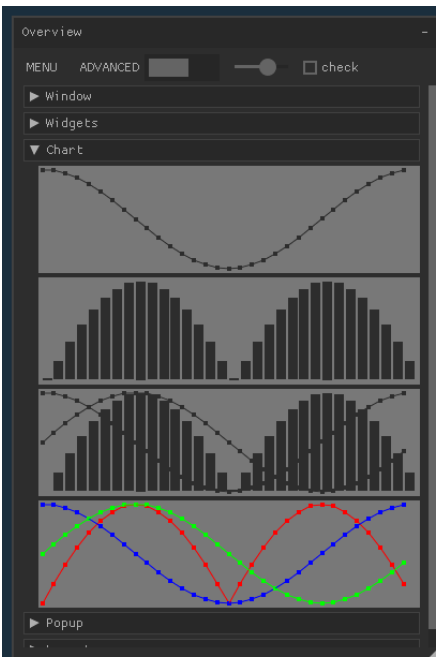
## ***Running the program “bin/demo”***

demo1



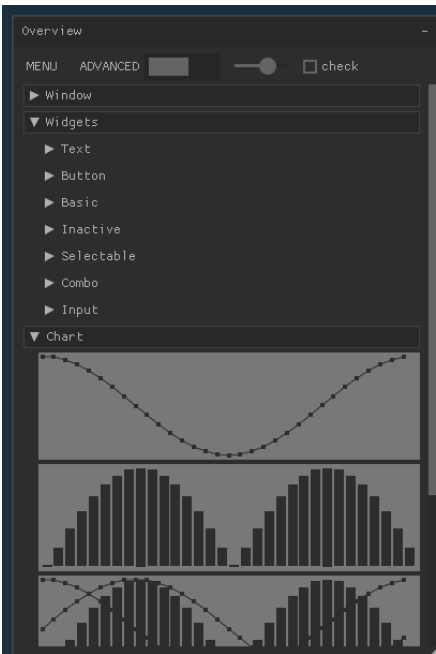
***Closing the first window in Demo. Depress the x on NodeEdit window. This brings up a new window. Clicking the Chart arrow brings up several graphs.***

demo2



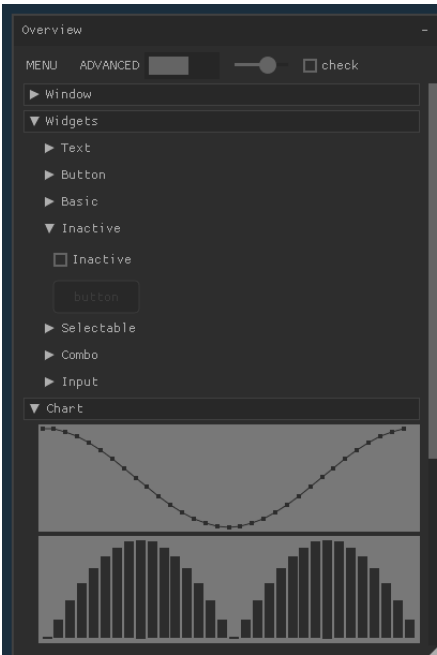
*Clicking the Widigets arrow brings up arrows for different type widigets.*

demo3



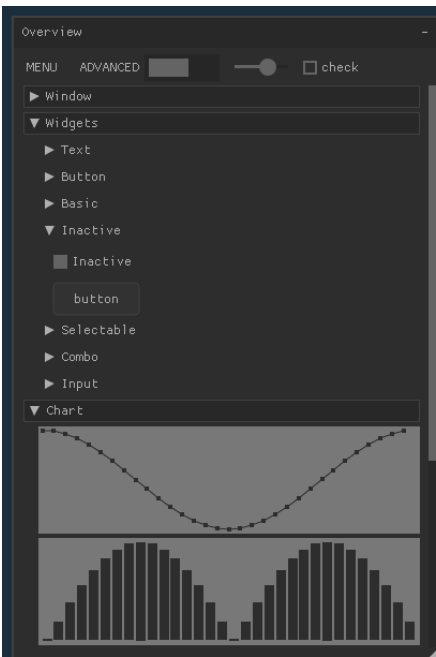
***Clicking the Inactive arrow brings up a check box and a button widigets.***

demo4



***Setting check box and the button is active widigets. Pressing the button displays button pressed in the start shell.***

demo5



## Appendix A Notes demo-tests

Testing nuklear 08/10/20 RPi4 4gB

demo x11 creates bin/zahnrad works okay

demo x11\_opengl2 creates bin/demo works okay

demo x11\_opengl3

bin/demo

[X11] Failed to create OpenGL 3.0 context

[X11] ... using old-style GLX context!

[GL]: Graphics card does not fullfill minimum OpenGL 2.0 support

demo: ../nuklear.h:13949: nk\_input\_begin: Assertion `ctx' failed.

Aborted

glfw\_opengl2

Makefile modification

- LIBS = -lglfw -lGL -lm -lGLU

+ LIBS = -lglfw3 -lGL -lm -lGLU

make

rm -f bin/demo

cc main.c -std=c99 -pedantic -O2 -o bin/demo -lglfw3 -lGL -lm -lGLU

/usr/bin/ld: //usr/local/lib/libglfw3.a(vulkan.c.o): undefined reference to symbol

'dlopen@@GLIBC\_2.4'

/usr/bin/ld: //lib/arm-linux-gnueabi/libdl.so.2: error adding symbols: DSO missing from command line

collect2: error: ld returned 1 exit status

make: \*\*\* [Makefile:25: demo] Error 1

```

devel@mypi3-20:~/nuklear/example $ make
cc -std=c99 -pedantic -O2 -o bin/file_browser file_browser.c -L/usr/local/lib -lglfw3 -lGL -lm -
lGLU -lGLEW
file_browser.c:15:10: fatal error: GL/glew.h: No such file or directory
#include <GL/glew.h>
      ^~~~~~
compilation terminated.
make: *** [Makefile:32: file_browser] Error 1

```

sudo apt install libglew-dev

```

devel@mypi3-20:~/nuklear/example $ make
cc -std=c99 -pedantic -O2 -o bin/file_browser file_browser.c -L/usr/local/lib -lglfw3 -lGL -lm -
lGLU -lGLEW
/usr/bin/ld: /usr/local/lib/libglfw3.a(vulkan.c.o): undefined reference to symbol
'dlopen@@GLIBC_2.4'
/usr/bin/ld: //lib/arm-linux-gnueabi/libdl.so.2: error adding symbols: DSO missing from command
line
collect2: error: ld returned 1 exit status
make: *** [Makefile:32: file_browser] Error 1

```

```

-      LIBS := $(GLFW3) -lGL -lm -lGLU -lGLEW
+      LIBS := $(GLFW3) -lX11 -lGL -lm -lGLU -lGLEW -ldl -lpthread
devel@mypi3-20:~/nuklear/example $ make
cc -std=c99 -pedantic -O2 -o bin/file_browser file_browser.c -L/usr/local/lib -lglfw3 -lX11 -lGL -lm -
lGLU -lGLEW -ldl -lpthread
cc -std=c99 -pedantic -O2 -o bin/extended extended.c -L/usr/local/lib -lglfw3 -lX11 -lGL -lm -
lGLU -lGLEW -ldl -lpthread
cc -std=c99 -pedantic -O2 -o bin/canvas canvas.c -L/usr/local/lib -lglfw3 -lX11 -lGL -lm -lGLU -
lGLEW -ldl -lpthread
cc -std=c99 -pedantic -O2 -o bin/skinning skinning.c -L/usr/local/lib -lglfw3
Yes, it's graphics card
limitation, mesa supports minimum 3.1 for all included drivers: https://mesamatrix.net/
Proprietary drivers should support max hardware capabilities too
ls bin/
canvas extended file_browser skinning

```

```

devel@mypi3-20:~/nuklear/example $ bin/canvas
Error 65543: GLX: Failed to create context: GLXBadFBConfig
canvas: /home/devel/glfw/src/window.c:958: glfwSetWindowUserPointer: Assertion `window !=
NULL' failed.
Aborted
devel@mypi3-20:~/nuklear/example $ bin/extended
Error 65543: GLX: Failed to create context: GLXBadFBConfig
extended: /home/devel/glfw/src/window.c:958: glfwSetWindowUserPointer: Assertion `window !=
NULL' failed.
Aborted
devel@mypi3-20:~/nuklear/example $ bin/file_browser
Error 65543: GLX: Failed to create context: GLXBadFBConfig

```

file\_browser: /home/devel/glfw/src/window.c:958: glfwSetWindowUserPointer: Assertion `window != NULL' failed.

Aborted

devel@mypi3-20:~/nuklear/example \$ bin/skinning

Error 65543: GLX: Failed to create context: GLXBadFBConfig

skinning: /home/devel/glfw/src/window.c:958: glfwSetWindowUserPointer: Assertion `window != NULL' failed.

Aborted

<https://github.com/vurtun/nuklear/issues/364>

glxinfo | grep 'version'

server glx version string: 1.4

client glx version string: 1.4

GLX version: 1.4

Max core profile version: 0.0

Max compat profile version: 2.1

Max GLES1 profile version: 1.1

Max GLES[23] profile version: 3.1

OpenGL version string: 2.1 Mesa 19.3.2

OpenGL shading language version string: 1.20

OpenGL ES profile version string: OpenGL ES 3.1 Mesa 19.3.2

OpenGL ES profile shading language version string: OpenGL ES GLSL ES 3.10

GL\_EXT\_separate\_shader\_objects, GL\_EXT\_shader\_implicit\_conversions,

comments

Hmmm... how odd, glxinfo shows 2.1 for me too. Is that a graphics card limitation? My system is up to date, so I don't think it's a software issue

Yes, it's graphics card limitation, mesa supports minimum 3.1 for all included drivers:

<https://mesamatrix.net/>

Proprietary drivers should support max hardware capabilities too

glfw\_opengl2

Makefile modification

- LIBS = -lglfw -lGL -lm -lGLU

+ LIBS = -lglfw3 -lGL -lm -lGLU

make

rm -f bin/demo

cc main.c -std=c99 -pedantic -O2 -o bin/demo -lglfw3 -lGL -lm -lGLU

/usr/bin/ld: //usr/local/lib/libglfw3.a(vulkan.c.o): undefined reference to symbol

'dlopen@@@GLIBC\_2.4'

/usr/bin/ld: //lib/arm-linux-gnueabi/libdl.so.2: error adding symbols: DSO missing from command line

collect2: error: ld returned 1 exit status

make: \*\*\* [Makefile:25: demo] Error 1

2nd chg

- LIBS = -lglfw3 -lGL -lm -lGLU

+ LIBS = -lglfw3 -lGL -lm -lGLU -lX11 -lGL -lm -lGLU -lGLEW -ldl -lpthread

devel@mypi3-20:~/nuklear/demo/glfw\_opengl3 \$ make

rm -f bin/demo

```

cc main.c -std=c99 -pedantic -O2 -o bin/demo -L/usr/local/lib -lglfw3 -lGL -lm -lGLU -IGLEW
/usr/bin/ld: /usr/local/lib/libglfw3.a(vulkan.c.o): undefined reference to symbol
'dlopen@@@GLIBC_2.4'
/usr/bin/ld: //lib/arm-linux-gnueabi/libdl.so.2: error adding symbols: DSO missing from command
line
collect2: error: ld returned 1 exit status
make: *** [Makefile:26: demo] Error 1
devel@mypi3-20:~/nuklear/demo/glfw_opengl3 $ git diff Makefile
diff --git a/demo/glfw_opengl3/Makefile b/demo/glfw_opengl3/Makefile
index da95261..159383d 100644
--- a/demo/glfw_opengl3/Makefile
+++ b/demo/glfw_opengl3/Makefile
@@ -16,7 +16,7 @@ else
     ifeq ($(UNAME_S),Darwin)
         LIBS := $(GLFW3) -framework OpenGL -framework Cocoa -framework IOKit -
framework CoreVideo -lm -IGLEW -L/usr/local/lib
     else
-        LIBS = $(GLFW3) -lGL -lm -lGLU -IGLEW
+        LIBS = $(GLFW3) -lGL -lm -lGLU -IGLEW -lX11 -lGL -lm -lGLU -IGLEW -ldl -
lpthread
     endif
endif
endif

```

```

devel@mypi3-20:~/nuklear/demo/glfw_opengl3 $ make
rm -f bin/demo
cc main.c -std=c99 -pedantic -O2 -o bin/demo -L/usr/local/lib -lglfw3 -lGL -lm -lGLU -IGLEW -
lX11 -lGL -lm -lGLU -IGLEW -ldl -lpthread
devel@mypi3-20:~/nuklear/demo/glfw_opengl3 $ bin/demo
Error 65543: GLX: Failed to create context: GLXBadFBConfig
demo: /home/devel/glfw/src/window.c:547: glfwGetWindowSize: Assertion `window != NULL'
failed.
Aborted

```

```

sudo apt-get install libsdl2-dev
devel@mypi3-20:~/nuklear/demo/sdl_opengl2 $ make
creates bin/demo works okay

```

```

devel@mypi3-20:~/nuklear/demo/x11_opengl2 $ bin/demo
[X11] Failed to create OpenGL 3.0 context
[X11] ... using old-style GLX context!
Major chg in demo when the Makefile is modified.
-CFLAGS += -std=c99 -pedantic -O2
+CFLAGS += -std=c99 -pedantic -O2 -DINCLUDE_ALL

```

Adding the -DINCLUDE\_ALL to Makefile in glfw\_opengl2

```

-CFLAGS += -std=c99 -pedantic -O2
+CFLAGS += -std=c99 -pedantic -O2 -DINCLUDE_ALL

```

Adding the -DINCLUDE\_ALL to Makefile in x11

```

-CFLAGS += -std=c89 -pedantic -O2

```



```
+CFLAGS += -std=c99 -pedantic -O2 -DINCLUDE_ALL
```