

JRsamayoa wrote

rendering code to nuklear_ultibo_gles2.h removed everything else (hopefully)

https://github.com/cejasmamas/ultibo_nuklear ultiboCgeneric.c uses nuklear_ultibo_gles2.h

<https://github.com/cejasmamas/ultiboTessellator> svgTessellator.c would be cleaned up using nuklear_ultibo_gles2.h. This would require changes to svgTessellator.c. In addition, this would make svgTessellator.c, more in line with both projects.

I had indicated that #include "nuklear_ultibo_gles2.h" be used svgTessellator.c

[https://gist.github.com/usercontent.com/deve ... ator.c.tmp](https://gist.github.com/usercontent.com/deve...ator.c.tmp)

This file tries to provide the changes needed. Can someone explain how this could be done in github so user JRsamayoa could test the changes in <https://github.com/cejasmamas/ultiboTessellator.git> and if acceptable he could merge into his repo.

This would help in support to other users. I believe this would be a pull request.

I don't know if this is all the changes required.

Any help in this area is appreciated.

I think this is the correct link

[https://gist.github.com/usercontent.com/deve ... ator.c.tmp](https://gist.github.com/usercontent.com/deve...ator.c.tmp)

I've seen this in a lot of places, this is really interesting
I don't know how to do it, what I can tell you is that by reading your file edit is everything should work, I can download and compile but its not part of the exercise, I'm really curious as how this is done, by the way you can also remove:

```
struct nk_gen_device {
    struct nk_buffer cmds;
    struct nk_draw_null_texture null;
    GLuint vbo, ebo;
    GLuint prog;
    GLuint vert_shdr;
    GLuint frag_shdr;
    GLint attrib_pos;
    GLint attrib_uv;
    GLint attrib_col;
    GLint uniform_tex;
    GLint uniform_proj;
    GLuint font_tex;
    GLsizei vs;
    size_t vp, vt, vc;
};
```

```
struct nk_gen_vertex {
    GLfloat position[2];
```

```

    GLfloat uv[2];
    nk_byte col[4];
};

static struct nk_gen {
    //SDL_Window *win;
    struct nk_gen_device ogl;
    struct nk_context ctx;
    struct nk_font_atlas atlas;
} gen;

NK_API void
nk_gen_device_create(void);

NK_API void
nk_gen_device_destroy(void);

NK_INTERN void
nk_gen_device_upload_atlas(const void *image, int width, int height);

NK_API void
nk_gen_render(enum nk_anti_aliasing AA, int max_vertex_buffer, int max_element_buffer, int
rwidth, int rheight);

NK_API struct nk_context*
nk_gen_init();

NK_API void
nk_gen_font_stash_begin(struct nk_font_atlas **atlas);

NK_API void
nk_gen_font_stash_end(void);

NK_API
void nk_gen_shutdown(void);

```

they are implemented in "nuklear_ultibo_gles2.h"

develone wrote: ↑

Wed Aug 19, 2020 2:09 pm

Can someone explain how this could be done in github so user JRsamayoa could test the changes in <https://github.com/cejasmamas/ultiboTessellator.git> and if acceptable he could merge into his repo.

GitHub have a guide that outlines the process of forking a repository and making a pull request to submit changes.

<https://guides.github.com/activities/forking/>

This might be a good starting point to learn about the process.

I read the guide that Ultibo provided. Now I hope this goes a bit smoother.

steps to create a pull request.

```
git clone https://github.com/develone/ultiboTessellator.git
```

```
cd ultiboTessellator
```

I don't know if this needed.

```
git checkout -b testpullreq
```

removed additional items
commented line 456 static void
needed / in lines 10 & 11 since working on a Linux system.

```
git push --set-upstream origin testpullreq
```

There are other chgs still required.

What are the steps for Ultibo member JRsamayoa?

Is he notified of the pull request. I do think this will help in sharing

projects between Ultibo members.

The screenshot shows a web browser window displaying a GitHub pull request. The browser's address bar shows the URL: `https://github.com/cejasmassas/ultiboTessellator/compare/master...develone:testpullreq`. The page title is "Comparing changes". Below the title, it says "Choose two branches to see what's changed or to start a new pull request. If you need to, you can also [compare across forks](#)." The comparison is set between the "base repository: cejasmassas/ultiboTessellator" and the "head repository: develone/ultiboTessellator", specifically comparing the "base: master" branch to the "compare: testpullreq" branch. A green checkmark indicates "Able to merge. These branches can be automatically merged." Below this, there is a yellow box with the text "Discuss and review the changes in this comparison with others. [Learn about pull requests](#)" and a green "Create pull request" button. A summary bar shows "1 commit", "2 files changed", "0 comments", and "1 contributor". The commit history shows a commit on Aug 20, 2020, by user 0eaac20, with the message "removed additional items". Below the commit history, it says "Showing 2 changed files with 337 additions and 313 deletions." The file list shows "nuklear_ultibo_gles2.h" with 326 lines. The diff view shows changes to the file, with a light green background for the added lines. The diff content includes a license header for Nuklear, stating it is in the public domain and has no warranty implied.

*****5, 5a, 6

[b]All help is appreciated. Should some of these post be put in a new thread?[/b]

[b]Starting with a clean repo following the initial pull request being applied JRsamayoa.[/b]

[quote]When doing the compile.sh in line 197

svgTessellator.c:197:11: warning: implicit declaration of function 'nk_gen_init'; did you mean 'nk_font_init'? [-Wimplicit-function-declaration]

```
ctx = nk_gen_init();
```

With my testpullreq

svgTessellator.c:197:11: warning: implicit declaration of function 'nk_ultibo_init'; did you mean 'nk_ultb_init'? [-Wimplicit-function-declaration]

```
ctx = nk_ultibo_init();[/quote]
```

[url]git clone https://github.com/cejasmamas/ultiboTessellator.git[/url]

[b]I see the cejasmas applied the pull request see the attached gitk.png.

[/b]

cd ultiboTessellator/

[code]This is what I used to compile libultiboCgeneric.a

```
#!/bin/bash
```

```
#rm -f *.o libsvgTessellator.a
```

```
arm-none-eabi-gcc -O2 -mabi=aapcs -marm -march=armv7-a -mfpv3-d16 \
```

```
-mfloat-abi=hard -D__DYNAMIC_REENT__ -I libtess2/Include/ -c svgTessellator.c \
```

```
libtess2/Source/bucketalloc.c libtess2/Source/dict.c libtess2/Source/geom.c \
```

```
libtess2/Source/mesh.c libtess2/Source/priorityq.c libtess2/Source/sweep.c \
```

```
libtess2/Source/tess.c
```

```
arm-none-eabi-ar rcs libultiboCgeneric.a svgTessellator.o bucketalloc.o \
```

```
dict.o geom.o mesh.o priorityq.o sweep.o tess.o
```

[/code]

[code]./compile.sh

svgTessellator.c: In function 'ultibo_C_main':

svgTessellator.c:197:11: warning: implicit declaration of function 'nk_gen_init'; did you mean 'nk_font_init'? [-Wimplicit-function-declaration]

```
ctx = nk_gen_init();
```

```
^~~~~~
```

```
nk_font_init
```

svgTessellator.c:197:9: warning: assignment makes pointer from integer without a cast [-Wint-conversion]

```
ctx = nk_gen_init();
```

```
^
```

svgTessellator.c:201:5: warning: implicit declaration of function 'nk_ultibo_font_stash_begin'; did you mean 'nk_ultb_font_stash_begin'? [-Wimplicit-function-declaration]

```
nk_ultibo_font_stash_begin(&atlas); //left here you can test more fonts
```

```
^~~~~~
```

```
nk_ultb_font_stash_begin
```

svgTessellator.c:208:5: warning: implicit declaration of function 'nk_ultibo_font_stash_end'; did you mean 'nk_ultb_font_stash_end'? [-Wimplicit-function-declaration]

```
nk_ultibo_font_stash_end();
```

```
^~~~~~
```

```
nk_ultb_font_stash_end
```

svgTessellator.c:236:7: warning: implicit declaration of function 'nuklear_MainLoop'; did you mean 'MainLoop'? [-Wimplicit-function-declaration]

```

    nuklear_MainLoop((void*)ctx); // here is the gui code
    ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
MainLoop
svgTessellator.c:288:5: warning: implicit declaration of function 'nk_ultibo_shutdown'; did you
mean 'nk_ultb_shutdown'? [-Wimplicit-function-declaration]
    nk_ultibo_shutdown(); // not needed but to show where it goes
    ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
    nk_ultb_shutdown
svgTessellator.c: At top level:
svgTessellator.c:457:1: warning: return type defaults to 'int' [-Wimplicit-int]
    nuklear_MainLoop(void* loopArg){
    ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
svgTessellator.c: In function 'nuklear_MainLoop':
svgTessellator.c:572:5: warning: implicit declaration of function 'nk_ultibo_render'; did you mean
'nk_ultb_render'? [-Wimplicit-function-declaration]
    nk_ultibo_render(NK_ANTI_ALIASING_ON, MAX_VERTEX_MEMORY,
MAX_ELEMENT_MEMORY, ScreenWidth, ScreenHeight);
    ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
    nk_ultb_render
[/code]

```

[code]When compiling with Lazarus IDE (Ultibo Edition) these are the errors I am getting.

```

Compile Project, OS: ultibo, Target: svgTessellator: Exit code 256, Errors: 1, Hints: 3
ultiboGLES2C.pas(72,24) Hint: Local variable "Key" does not seem to be initialized
ultiboGLES2C.pas(112,51) Hint: Local variable "count" does not seem to be initialized{$linklib
libultiboCgeneric}
ultiboGLES2C.pas(12,109) Hint: Unit "math" not used in ultiboGLES2C
/usr/bin/arm-none-eabi-ld: libultiboCgeneric.a(svgTessellator.o): in function
`nuklear_MainLoop':procedure ultibo_C_main; cdecl; external 'libultiboCgeneric' name
'ultibo_C_main';
svgTessellator.c:(.text+0x369fc): undefined reference to `nk_ultibo_render'
/usr/bin/arm-none-eabi-ld: libultiboCgeneric.a(svgTessellator.o): in function `ultibo_C_main':arm-
none-eabi-objdump -d libultiboCgeneric.a | less
svgTessellator.c:(.text+0x37030): undefined reference to `nk_gen_init'
/usr/bin/arm-none-eabi-ld: svgTessellator.c:(.text+0x37050): undefined reference to
`nk_ultibo_font_stash_begin' 369fc:    ebfffffe    bl    0 <nk_ultibo_render>
/usr/bin/arm-none-eabi-ld: svgTessellator.c:(.text+0x37070): undefined reference to
`nk_ultibo_font_stash_end' 36a00:    e28dd03c    add    sp, sp, #60    ; 0x3c
[/code]svgTessellator.lpr(57,59) Error: Error while linking 36a04:    ecdb8b02    vpop    {d8}

```

[code]arm-none-eabi-objdump -d svgTessellator.o | less

```

3684c:    0a000112    beq    36c9c <nuklear_MainLoop+0x470>
36850:    e3530004    cmp    r3, #4
36854:    0a00010d    beq    36c90 <nuklear_MainLoop+0x464>
36858:    e3530001    cmp    r3, #1

37030:    ebfffffe    bl     0 <nk_gen_init>
37034:    e58da010    str    sl, [sp, #16]
37038:    e3006000    movw   r6, #0

```

```

37050:  ebfffffe  bl    0 <nk_ultibo_font_stash_begin>
37054:  eeb30a00  vmov.f32    s0, #48 ; 0x41800000 16.0
37058:  ee192a10  vmov    r2, s18

37070:  ebfffffe  bl    0 <nk_ultibo_font_stash_end>
37074:  e28a1004  add     r1, sl, #4
37078:  e59da010  ldr     sl, [sp, #16]
3707c:  e59a0000  ldr     r0, [sl]

```

[/code]

git clone <https://github.com/develone/ultiboTessellator.git>

cd ultiboTessellator/

git checkout testpullreq

[code]./compile.sh

svgTessellator.c: In function 'ultibo_C_main':

svgTessellator.c:197:11: warning: implicit declaration of function 'nk_ultibo_init'; did you mean 'nk_ultb_init'? [-Wimplicit-function-declaration]

```

    ctx = nk_ultibo_init();
           ^~~~~~

```

nk_ultb_init

svgTessellator.c:197:9: warning: assignment makes pointer from integer without a cast [-Wint-conversion]

```

    ctx = nk_ultibo_init();
           ^

```

svgTessellator.c:201:5: warning: implicit declaration of function 'nk_ultibo_font_stash_begin'; did you mean 'nk_ultb_font_stash_begin'? [-Wimplicit-function-declaration]

```

    nk_ultibo_font_stash_begin(&atlas); //left here you can test more fonts
           ^~~~~~

```

nk_ultb_font_stash_begin

svgTessellator.c:208:5: warning: implicit declaration of function 'nk_ultibo_font_stash_end'; did you mean 'nk_ultb_font_stash_end'? [-Wimplicit-function-declaration]

```

    nk_ultibo_font_stash_end();
           ^~~~~~

```

nk_ultb_font_stash_end

svgTessellator.c:236:7: warning: implicit declaration of function 'nuklear_Main' [-Wimplicit-function-declaration]

```

    nuklear_Main((void*)ctx); // here is the gui code
           ^~~~~~

```

svgTessellator.c:288:5: warning: implicit declaration of function 'nk_ultibo_shutdown'; did you mean 'nk_ultb_shutdown'? [-Wimplicit-function-declaration]

```

    nk_ultibo_shutdown(); // not needed but to show where it goes
           ^~~~~~

```

nk_ultb_shutdown

svgTessellator.c: At top level:

svgTessellator.c:457:1: warning: return type defaults to 'int' [-Wimplicit-int]

```

nuklear_Main(void* loopArg){
           ^~~~~~

```

svgTessellator.c: In function 'nuklear_Main':

```
svgTessellator.c:572:5: warning: implicit declaration of function 'nk_ultibo_render'; did you mean 'nk_ultb_render'? [-Wimplicit-function-declaration]
```

```
    nk_ultibo_render(NK_ANTI_ALIASING_ON, MAX_VERTEX_MEMORY,  
MAX_ELEMENT_MEMORY, ScreenWidth, ScreenHeight);
```

```
    ^~~~~~
```

```
    nk_ultb_render
```

```
[/code]
```

[code]When compiling with Lazarus IDE (Ultibo Edition) these are the errors I am getting.

```
Compile Project, OS: ultibo, Target: svgTessellator: Exit code 256, Errors: 1, Hints: 3  
ultiboGLES2C.pas(72,24) Hint: Local variable "Key" does not seem to be initialized  
ultiboGLES2C.pas(112,51) Hint: Local variable "count" does not seem to be initialized  
ultiboGLES2C.pas(12,109) Hint: Unit "math" not used in ultiboGLES2C  
/usr/bin/arm-none-eabi-ld: libultiboCgeneric.a(svgTessellator.o): in function `nuklear_Main':  
svgTessellator.c:(.text+0x369fc): undefined reference to `nk_ultibo_render'  
/usr/bin/arm-none-eabi-ld: libultiboCgeneric.a(svgTessellator.o): in function `':  
svgTessellator.c:(.text+0x37030): undefined reference to `nk_ultibo_init'  
/usr/bin/arm-none-eabi-ld: svgTessellator.c:(.text+0x37050): undefined reference to  
`nk_ultibo_font_stash_begin'  
/usr/bin/arm-none-eabi-ld: svgTessellator.c:(.text+0x37070): undefined reference to  
`nk_ultibo_font_stash_end'  
svgTessellator.lpr(57,59) Error: Error while linking
```

```
arm-none-eabi-objdump -d svgTessellator.o | less
```

```
nuklear_Main nk_ultibo_render      ultibo_C_main      nk_ultibo_init  
nk_ultibo_font_stash_begin nk_ultibo_font_stash_end
```

```
3684c: 0a000112    beq    36c9c <nuklear_Main+0x470>  
36850: e3530004    cmp    r3, #4  
36854: 0a00010d    beq    36c90 <nuklear_Main+0x464>  
36858: e3530001    cmp    r3, #1
```

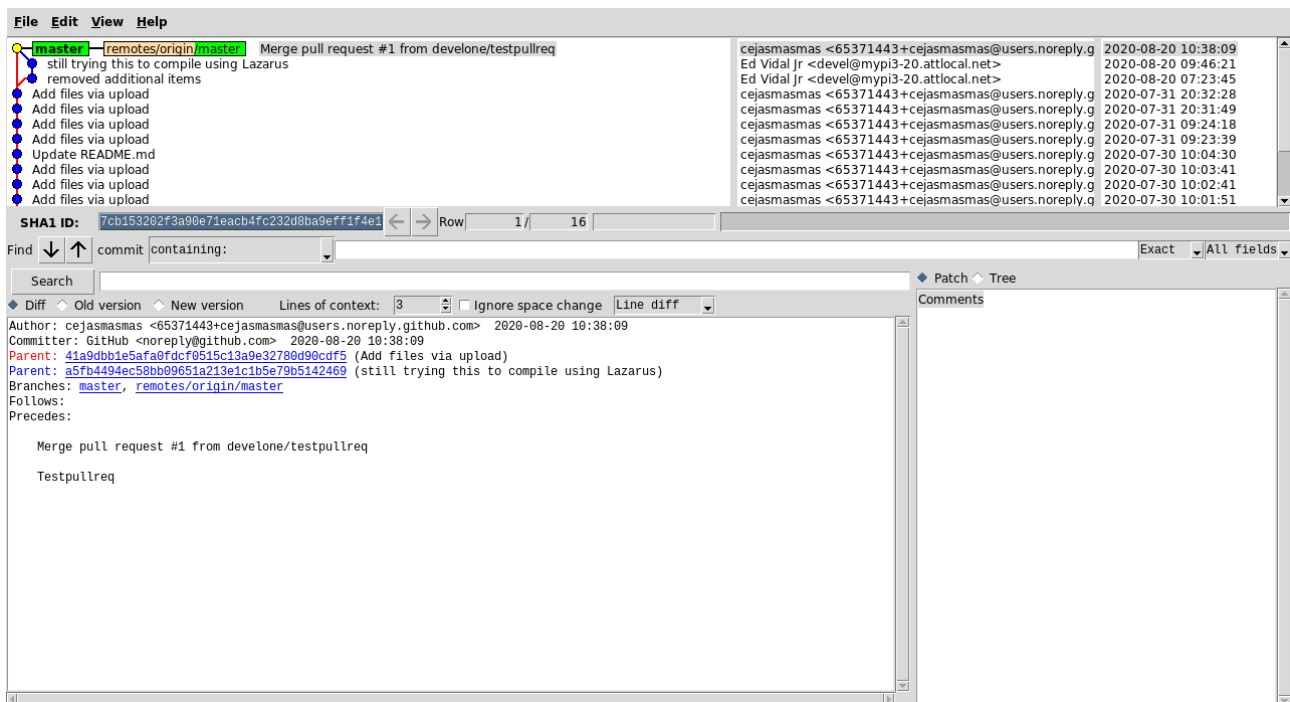
```
369fc: ebfffffe    bl     0 <nk_ultibo_render>  
36a00: e28dd03c    add    sp, sp, #60 ; 0x3c  
36a04: ec8db002    vpop   {d8}  
  
36dc4: e59f1564    ldr    r1, [pc, #1380] ; 37330 <ultibo_C_main+0x57c>  
36dc8: e2810004    add    r0, r1, #4  
36dcc: e24ddf0b    sub    sp, sp, #684 ; 0x2ac  
36dd0: ebfffffe    bl     0 <getScreenSize>  
36dd4: e59fe558    ldr    lr, [pc, #1368] ; 37334 <ultibo_C_main+0x580>
```

```
37030: ebfffffe    bl     0 <nk_ultibo_init>  
37034: e58da010    str    sl, [sp, #16]  
37038: e3006000    movw   r6, #0
```

```
[/code]
```

```
37050: ebfffffe    bl     0 <nk_ultibo_font_stash_begin>  
37054: eeb30a00    vmov.f32 s0, #48 ; 0x41800000 16.0  
37058: ee192a10    vmov    r2, s18
```

```
37070:  ebfffffe    bl    0 <nk_ultibo_font_stash_end>
37074:  e28a1004    add   r1, sl, #4
```



*****7

[b]This demonstrates that a pull request works. I do think this will help in sharing work with other members. This provided a good understanding on the benefit of git.[/b]

```
[url]git clone https://github.com/cejasmassas/ultiboTessellator.git
[/url]
cd ultiboTessellator/
```

[b]I see the cejasmasmas applied the pull request see the attached gitk1.png.
[b]

[code]Since I am working on a RPi4 4GB needed to modify svgTessellator.c

```
git diff svgTessellator.c
diff --git a/svgTessellator.c b/svgTessellator.c
index 21aa916..97bcb30 100644
--- a/svgTessellator.c
+++ b/svgTessellator.c
@@ -7,8 +7,8 @@
```

```
#include <stdio.h>
```

```
-#include "opt/vc/include/GLES/gl.h"
-#include "opt/vc/include/GLES2/gl2.h"
+#include "/opt/vc/include/GLES/gl.h"
+#include "/opt/vc/include/GLES2/gl2.h"
```


[/code]

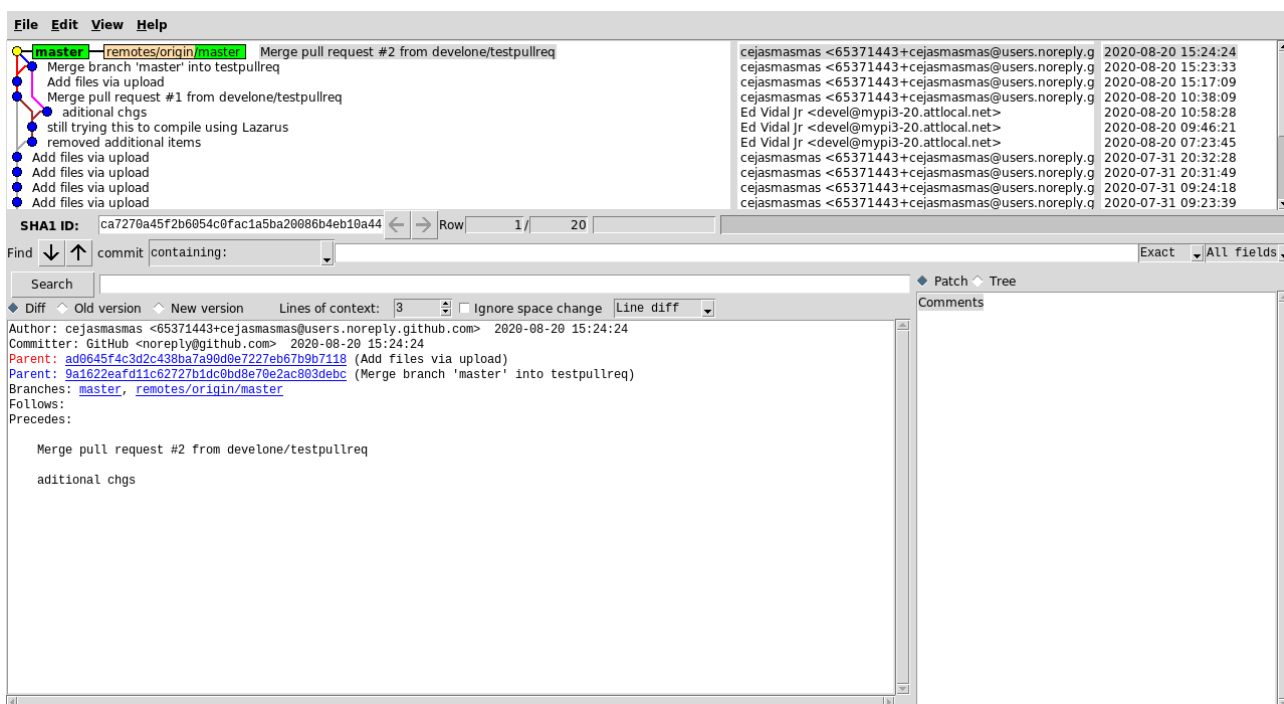
[/code]

```
[b]./compile.sh
```

[/b]

[b]This is what I get when compiling with Lazarus IDE (Ultibo Edition) see the attached laz.png.

[/b]



laz

svgTessellator.lpr x ultiboGLES2C x

```
. mouseBt: integer = 0;
55
.
. {The main functions of our GLES2 example}
. procedure StartGLES2;
. procedure CleanupGLES2(var State:TGLES2State);
60 procedure NonBlockingMouse;
.
. {Functions dealing with initializing, updating and rendering our OpenGL ES scene}
. function GLES2Init(var State:TGLES2State):Boolean;
.
65
. implementation
. procedure getKey(var value : integer);
. var
.   Key: Char;
70 begin
.   // Check if a key is available (without waiting)
72 if ConsolePeekKey(Key, nil) then
```

72: 24 INS /home/devel/ultiboTessellator/ultiboGLES2C.pas

Compile Project OS: ultibo, Target: svgTessellator: Success, Hints: 3

ultiboGLES2C.pas(72,24) Hint: Local variable "Key" does not seem to be initialized

ultiboGLES2C.pas(112,51) Hint: Local variable "count" does not seem to be initialized

ultiboGLES2C.pas(12,109) Hint: Unit "math" not used in ultiboGLES2C