

\$SPAD/src/lib util.c

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December 3, 2016

**Abstract**

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```
#include <stdlib.h>
```

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The MACOSX platform is broken because no matter what you do it seems to include files from `[[/usr/include/sys]]` ahead of `[[/usr/include]]`. On linux systems these files include themselves which causes an infinite regression of includes that fails. GCC gracefully steps over that problem but the build fails anyway. On MACOSX the `[[/usr/include/sys]]` versions of files are badly broken with respect to the `[[/usr/include]]` versions.

— \* —

```
#if defined(MACOSXplatform)
#include "/usr/include/unistd.h"
#else
#include <unistd.h>
#endif
#include <sys/types.h>
#include <stdio.h>
#include <errno.h>
#include <X11/Xlib.h>
#include <X11/Xutil.h>
#include "view.h"

#include "util.h1"

int
checker(int code, int lineNumber, char *errorStr)
{
    if (code < 0) {
        fprintf(stderr, "Error occured during %s\n", errorStr);
        fprintf(stderr, "Error code of %d\n", errno);
        fprintf(stderr, "Error in line number %d of process %d\n",
                lineNumber, getpid());
        perror("");
    }
    return (code);
}

char *
getmemWithLine(int nbytes, char *str, int lineNum)
{
    char *p;

    p = (char *) malloc(nbytes);
    if (!p) {
```

```

        fprintf(stderr,
            "getmem: Could not get %d bytes for %s at line %d\n",
            nbytes, str, lineNumber);
        exit(99);
    }
    return p;
}

char *
saymemWithLine(char *str, int num, int size, int lineNumber)
{
    char *p;
    p = getmemWithLine(num * size, str, lineNumber);
    return p;
}

void
myfree(void *p, int size)
{
    free(p);
}

XPoint
getWindowPositionXY(Display *display, Window w)
{
    XPoint position;
    Window rootW, parentW, *childrenWs, tmpW;
    unsigned int nChildren;
    XWindowAttributes windowAttrib;
    int screen, tmp = 1;

    screen = DefaultScreen(display);
    tmpW = w;
    while (tmp) {
        XQueryTree(display, tmpW, &rootW, &parentW, &childrenWs, &nChildren);
        XFree((char *)childrenWs);
        if (parentW == RootWindow(display, screen))
            tmp = 0;
        else
            tmpW = parentW;
    }
    XGetWindowAttributes(display, tmpW, &windowAttrib);
    position.x = (short) windowAttrib.x;
    position.y = (short) windowAttrib.y;
    return (position);
}

XPoint
getWindowSizeXY(Display *display, Window w)
{

```

```

XPoint size;
Window rootW, parentW, *childrenWs, tmpW;
unsigned int nChildren;
XWindowAttributes windowAttrib;
int screen, tmp = 1;

screen = DefaultScreen(display);
tmpW = w;
while (tmp) {
    XQueryTree(display, tmpW, &rootW, &parentW, &childrenWs, &nChildren);
    XFree((char *)childrenWs);
    if (parentW == RootWindow(display, screen))
        tmp = 0;
    else
        tmpW = parentW;
}
XGetWindowAttributes(display, tmpW, &windowAttrib);
size.x = (short) windowAttrib.width;
size.y = (short) windowAttrib.height;
return (size);
}

```

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## 1 License

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## References

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