Using FSRead to Read from a File

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/* Using FSRead to Read from a File
  * This is a simple demonstration of using SFGetFile, FSOpen and FSRead.  It
  * prompts the user for a text file and then writes the contents of that file to the
  * console window.  It is intended only as an example and so contains a minimum of
  * error handling.
 */

// Assumes inclusion of <MacHeaders>
#include <stdio.h>
#include <stdlib.h>

void ToolBoxInit (void);
void GetAFile (Handle* handleToFileData, long *fileSize);

void ToolBoxInit ()
{
    InitGraf (&thePort);
    InitFonts ();
    InitWindows ();
    InitMenus ();
    TEInit ();
    InitDialogs (nil);
    InitCursor ();
}

void GetAFile (Handle* handleToFileData, long *fileSize)
{
    short       fileRefNum;
    SFTypeList  typeList;
    Point       where;
    SFReply     aReply;
    OSErr       err;
    long        count;

    SetPt (&where, 0, 0);
    typeList[0] = 'TEXT';
    SFGetFile (where, nil, nil, 1, typeList, nil, &aReply);
    if (aReply.good)
    {
        err = FSOpen (aReply.fName, aReply.vRefNum, &fileRefNum);
        if (!err) {
            err = GetEOF (fileRefNum, fileSize);
            if (!err) {
                if (fileSize == 0)
                {
                    printf ("Nothing in file\n");
                    exit (1);
                }
                *handleToFileData = NewHandle (*fileSize);
                if (*handleToFileData == nil)
                {
                printf ("Sorry, the file is too big to read at once\n");
                err = FSClose (fileRefNum);
                exit (1);
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                        }
                        HLock (*handleToFileData);
                        count = *fileSize;
                        err = FSRead (fileRefNum, &count, **handleToFileData);
                        if ((err) || (count != *fileSize)) {
                                printf ("Problem reading file\n");
                                err = FSClose (fileRefNum);
                                exit (1);
                        }
                        HUnlock (*handleToFileData);
                }
                else {
                        printf ("Problem getting size of file\n");
                        err = FSClose (fileRefNum);
                        exit (1);
                }
        }
        else {
                printf ("Problem opening file\n");
                exit (1);
        }
    }
}


main ()
{
    Handle handleToData;
    short  i;
    long   fileSize;

    ToolBoxInit();
    GetAFile (&handleToData, &fileSize);
    HLock (handleToData);
    for (i = 0; i < fileSize; i++)
        if (((*handleToData)[i]) == '\r')
            putchar ('\n');
        else
            putchar ((*handleToData)[i]);
    HUnlock (handleToData);
    while (!Button ());
}
```