Subject: reading & writing a file
Posted by silverx on Tue, 31 May 2011 15:47:39 GMT
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I am trying to read a file, once I get that done, I will want to be able to write a file out. Not only read/write a full line at one time, but will want to be able to read/write a binary file 1 byte at a time.

Are their any examples of reading a file, and writing a file?

It doesn't seem to find ifstream.

Any help with this, maybe other includes?

The errors are as follows:

```
C:\MyApps\readme\main.cpp(13) : error C2065: 'ifstream' : undeclared identifier
C:\MyApps\readme\main.cpp(13) : error C2065: 'file' : undeclared identifier
C:\MyApps\readme\main.cpp(14) : error C2448: 'Readini' : function-style initializer appears to be a
function definition
C:\MyApps\readme\main.cpp(24) : error C2065: 'ifstream' : undeclared identifier
C:\MyApps\readme\main.cpp(24) : error C2146: syntax error : missing ';' before identifier 'inifile'
C:\MyApps\readme\main.cpp(24) : error C3861: 'inifile': identifier not found
C:\MyApps\readme\main.cpp(27) : error C2513: 'Upp::String' : no variable declared before '='
C:\MyApps\readme\main.cpp(27) : error C2065: 'inifile' : undeclared identifier
C:\MyApps\readme\main.cpp(28) : error C2065: 'inifile' : undeclared identifier
C:\MyApps\readme\main.cpp(28) : error C2228: left of '.eof' must have class/struct/union
        type is ''unknown-type''
C:\MyApps\readme\main.cpp(27) : error C3861: 'Readini': identifier not found
C:\MyApps\readme\main.cpp(29) : error C2143: syntax error : missing ';' before '('
C:\MyApps\readme\main.cpp(29) : error C2059: syntax error : ')'
C:\MyApps\readme\main.cpp(32) : error C2065: 'inifile' : undeclared identifier
C:\MyApps\readme\main.cpp(32) : error C2228: left of '.close' must have class/struct/union
        type is ''unknown-type''
readme: 1 file(s) built in (0:02.05), 2059 msecs / file, duration = 2106 msecs, parallelization 0%

There were errors. (0:02.79)
```

The code is as follows, right now just a blank layout, is all I have. The code I got from a C++ book so I just copied what they had for it:

```
#include "readme.h"


using namespace Upp;

#include <iostream>
#include <string>
```

```
#include <fstream>



String Readini(ifstream &file)
{
 char buf[300];  // up to 300 bytes per line of input
 file.getline(&(buf[0], 300);
 return String(buf);
}

int DoLoadFunctions()
{
 String file = "learn.ini";

 ifstream inifile(file);
 while (1)
 {
  String inline = Readini(inifile);
  if (inifile.eof() == true)
   break();

 }
 inifile.close();



 PromptOK("This is a test");



 return 0;

}




readme::readme()
{
 //  added to make window sizeable and zoomable
 TopWindow::Sizeable(true);
    TopWindow::Zoomable(true);

 CtrlLayout(*this, "Read a File on Start up");
}
```

```
GUI_APP_MAIN
{

 int lfreturn = DoLoadFunctions();

 if (lfreturn == 0)
    {
       readme().Run();
    }
 else
    {
  // close it


    }


}
```

Subject: Re: reading & writing a file
Posted by Anonymous on Tue, 31 May 2011 17:38:48 GMT
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Hello,

Please use [CODE] [/CODE] tags to mark code, so it get well formated.

Standard functions reside in std namespace so, you have to add using namespace std; after your includes

```
#include <iostream>
#include <string>
#include <fstream>
using namespace std;
```

In Readini you're missing an ')';

```
line:
file.getline(&(buf[0], 300);
```

You may write Readini like:

```
String Readini(ifstream &file)
{
 char buf[300]; // up to 300 bytes per line of input
 file.getline(buf, 300);
 return String(buf);
}
```

In DoLoadFunctions:

inline - is a C++ keyword, so you can't have a variable with that name;
break - it's a C++ keyword, not a function;
Correct DoLoadFunctions would be

```
int DoLoadFunctions()
{
 String file = "learn.ini";
 ifstream inifile(file);
 while (1)
 {
  String inl = Readini(inifile);
  if (inifile.eof() == true)
   break;
 }
 inifile.close();
 PromptOK("This is a test");
 return 0;
}
```

You may use U++ functions so you don't have to mix STL code with U++. If you want to read one byte at a time you may use use the following code:

```
FileIn fi;
fi.Open("learn.ini");
while (!fi.IsEof() && fi.IsOK())
 fi.Get(); // do something with it...
```

If you want to read an *.ini file you may use LoadIniFile (see help).

Andrei

Subject: Re: reading & writing a file
Posted by silverx on Wed, 01 Jun 2011 08:17:30 GMT
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I tried this and added a PromptOK(inl); so I can check what it is reading. Thanks.

When I run it nows gives me an box that has:

ERROR: Invalid UTF-8 sequence: `#

On the first line only, after that it just has a blank box instead of data to put out on other lines in the file.

The file is saved as unicode, as it will contain not only America characters, but will have Russian or Ukrainian characters and words in it as well. So it has to be saved in unicode.

Not sure if it is the PromptOK that has the issue or the read. If I don't put the PromptOK, I don't

get any error, but I am not sure it is processing the file either.

David

Subject: Re: reading & writing a file
Posted by dolik.rce on Wed, 01 Jun 2011 09:37:54 GMT
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silverx wrote on Wed, 01 June 2011 10:17I tried this and added a PromptOK(inl); so I can check what it is reading. Thanks.

When I run it nows gives me an box that has:

ERROR: Invalid UTF-8 sequence: `#
Hi David,
The PromptOK() expects qtf formatted string as argument, please read the page on QTF. To pass a normal string to it, use PromptOK(DeQtf(inl)) to escape the characters that would be interpretted as qtf formating code or PromptOK("\1"+inl), to mark the entire string as non-qtf.

Honza

Subject: Re: reading & writing a file
Posted by silverx on Wed, 01 Jun 2011 11:49:39 GMT
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I tried that, and still got the same error. I tried that after trying that on another issue.

Any more suggestions?

Subject: Re: reading & writing a file
Posted by cbpporter on Wed, 01 Jun 2011 12:03:38 GMT
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silverx wrote on Wed, 01 June 2011 14:49I tried that, and still got the same error. I tried that after trying that on another issue.

Any more suggestions?
Yes. You may be trying to insert a invalid sequence into a Utf8 sequence, very common when trying o copy a 8bit encoding into Utf8 without converting it first.

Try dumping the binary values of inl somewhere and seeing if they are valid Utf. Easy way to see: if you have characters over 127, then the following character must follow special rules.

Subject: Re: reading & writing a file
Posted by silverx on Wed, 01 Jun 2011 12:20:06 GMT
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It is a simple text file, created with notepad, and then saved as a unicode file, and the first character in the file is a #.

Subject: Re: reading & writing a file
Posted by koldo on Wed, 01 Jun 2011 13:55:32 GMT
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Hello SilverX

I guess your file has a BOM, so you could try with LoadFileBOM() function.

You can be sure if your file begins with sequences like:

Encoding Representation (decimal)
UTF-8 239 187 191
UTF-16 (BE) 254 255
UTF-16 (LE) 255 254
UTF-32 (BE) 0 0 254 255
UTF-32 (LE) 255 254 0 0
UTF-7 43 47 118, and one of the following: [56 | 57 | 43 | 47]
UTF-1 247 100 76
UTF-EBCDIC 221 115 102 115
SCSU 14 254 255
BOCU-1 251 238 40 optionally followed by 255
GB-18030 132 49 149 51

Subject: Re: reading & writing a file
Posted by silverx on Thu, 02 Jun 2011 18:49:51 GMT
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Thank you for this information.

You are correct, as I found a hex viewer and did look at the hex of the file it was FF FE to start with.

And I look at the function you listed LoadFileBOM, and found it would be better for me to use the LoadFileBOMW instead.

The downside to this is it reads it in as a single WString or String, and not a line at a time.

The reason I decided on the LoadFileBOMW is I need to convert it back to a single line of input

then take certain bytes out of it, and need to do a select of bytes based upon position in the line.

Subject: Re: reading & writing a file
Posted by koldo on Thu, 02 Jun 2011 20:03:04 GMT
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Excellent!