

Author's notes:

Ever since Brad Moore published the great article "Working With Strings - Part 3" in LB Newsletter #141 I had been looking for a suitable project to test it on. When Carl suggested a Lesson Formatter I went right to work. I'm only a yearling but I did what I could with it.

It's plain and it does the job--but it's V E R Y S L O W. I'm sure the experts can fix that. In the spirit of "community" I'm not putting my name on it and expect anyone with a better idea to just go in and edit it. If a better one is created just remove it.

Because it takes several seconds to parse the entire lesson file I added the ability to save and reopen the results as a text file. I did give it a Print utility but I removed it. The font had to be reduced to a tiny point 9 and with "!lines countVar" reporting almost 5,000 lines it would take 70+ pages to print it out. Someone must know a better way.

Hopefully it will at least spark an interest in XML parsing. I'll probably remove these notes after a few days.

(The dangling semi-colons are actually displayed in the lessons--they had me going for a while until I realized that.)

'Replace Strings function was posted by Brad Moore on conforums 11-27-05

```
leng=90                                'length of texteditor line
Global leng, tag$, comment$

WindowWidth=760
WindowHeight=590
UpperLeftX = Int((DisplayWidth - WindowWidth)/2)
UpperLeftY = Int((DisplayHeight - WindowHeight)/2)

Nomainwin
Menu #main, "&File", "&Open", getTutorial, "&Save", saveText, "&Quit", quitMenu
Texteditor #main.tb1, 5, 5, 740, 500
Statictext #main.status, "", 680, 510, 60, 25
Open "Parse Liberty Basic 4 Tutorial" for Window as #main

Print #main, "Trapclose quit"
Print #main.tb1, "!autoresize";
Print #main, "Font Courier_New 10"
Print #main.status, "!Font Courier_New 11 Bold"
Print #main.status, "!Hide" 'otherwise will be visible if textedit
```

or is maximized

```
Call getTutorial
Wait
```

```
***** SUBS AND FUNCTIONS *****
```

```
Sub quitMenu
Call quit handle$
End Sub
```

```
Sub quit handle$
Close #main
End Sub
```

```
Sub getTutorial
FileDialog "Open Liberty Basic lesson file", "*.lsn;*.txt", fileName$
If Right$(fileName$,3) = "txt" Then Call getText fileName$
If fileName$<>" Then
Print #main.status, "!Show"
Open fileName$ For Input As #1
Do
Line Input #1, comment$
startPos=Instr(comment$,"<",marker)
endPos=Instr(comment$,">",marker)
tag$ = Left$(comment$,endPos-startPos+1)
progress=progress+1
Print #main.status, Int(progress*.051); " %" 'calculated by 10
0/1958 lines
```

```
Select Case tag$
Case "<lesson-title>"
Call blankLines 2
Call lessonTitle comment$
Call blankLines 2
Case "<lesson-comment>"
Line Input #1, comment$
progress=progress+1
Print #main.status, Int(progress*.051); " %"
Call printComments comment$
Call blankLines 2
Case "<lesson-code>"
Line Input #1, comment$
progress=progress+1
Print #main.status, Int(progress*.051); " %"
```

```
        Call printCode comment$
        Call blankLines 2
    Case "<chapter-title>"
        Call chapterTitle comment$
        Call blankLines 2
    Case "<chapter-comment>"
        Line Input #1, comment$
        progress=progress+1
        Print #main.status, Int(progress*.051); " %"
        Call printComments comment$
        Call blankLines 2
    Case "<section-title>"
        Call sectionTitle comment$
        Call blankLines 2
    Case "<section-comment>"
        Line Input #1, comment$
        progress=progress+1
        Print #main.status, Int(progress*.051); " %"
        Call printComments comment$
        Call blankLines 2
    Case "<section-code>"
        Line Input #1, comment$
        progress=progress+1
        Print #main.status, Int(progress*.051); " %"
        Call printCode comment$
        Call blankLines 2
    Case "<example-title>"
        Call exampleTitle comment$
        Call blankLines 2
    Case "<example-comment>"
        Line Input #1, comment$
        progress=progress+1
        Print #main.status, Int(progress*.051); " %"
        Call printComments comment$
        Call blankLines 2
    Case "<example-code>"
        Line Input #1, comment$
        progress=progress+1
        Print #main.status, Int(progress*.051); " %"
        Call printCode comment$
        Call blankLines 2
End Select
Loop While eof(#1) = 0
Print #main.status, ""
Close #1
Print #main.status, "!Hide"
```

```
Print #main.tb1, "!origin 1 1" ;  
End if  
End Sub
```

```
Sub getText fileName$  
Open fileName$ For Input As #1  
Print #main.tb1, "!contents #1";  
Close #1  
End Sub
```

```
Sub saveText  
FileDialog "Save As... (TEXT ONLY)", "*.txt", fileName2$  
If fileName2$<> "" Then  
Open fileName2$ For Output As #1  
Print #main.tb1, "!contents? textTutorial$";  
Print #1, textTutorial$  
Close #1  
End If  
End Sub
```

```
Sub lessonTitle comment$  
startPos=Instr(comment$,"<lesson-title>",1)+14  
endPos=Instr(comment$,"</lesson-title>",1)-1  
title$=Mid$(comment$,startPos,endPos-(startPos-1))  
Print #main.tb1, Space$(int(leng/2)-(int(len(title$)/2))); title$  
End Sub
```

```
Sub chapterTitle comment$  
startPos=Instr(comment$,"<chapter-title>",1)+15  
endPos=Instr(comment$,"</chapter-title>",1)-1  
title$=Mid$(comment$,startPos,endPos-(startPos-1))  
Print #main.tb1, Space$(int(leng/2)-(int(len(title$)/2))); title$  
End Sub
```

```
Sub sectionTitle comment$  
startPos=Instr(comment$,"<section-title>",1)+15  
endPos=Instr(comment$,"</section-title>",1)-1  
title$=Mid$(comment$,startPos,endPos-(startPos-1))  
Print #main.tb1, Space$(int(leng/2)-(int(len(title$)/2))); title$  
End Sub
```

```
Sub exampleTitle comment$  
startPos=Instr(comment$,"<example-title>",1)+15  
endPos=Instr(comment$,"</example-title>",1)-1  
title$=Mid$(comment$,startPos,endPos-(startPos-1))  
Print #main.tb1, Space$(int(leng/2)-(int(len(title$)/2))); title$
```

End Sub

```
Sub printCode comment$
  If Right$(comment$, 32) = "no code example for this section" Then
Exit Sub
  If Right$(comment$, 28) = "place your example code here" Then Exit
Sub
  line3$=replaceStr$(comment$, "&#9;", "    ") 'convert tab
  comment$ = line3$
  line3$=replaceStr$(comment$, "&quot;", chr$(34)) 'quotation mark
  comment$ = line3$
  line3$=replaceStr$(comment$, "&lt;", "<") 'lesser than
  comment$ = line3$
  line3$=replaceStr$(comment$, "&gt;", ">") 'greater than
  comment$ = line3$
  line3$=replaceStr$(comment$, "&amp;", "&") 'ampersand
  comment$ = line3$
  newCode$=replaceStr$(comment$, "&#13;&#10;", chr$(13)+chr$(10)) 'l
ine break
  Print #main.tb1, newCode$
End Sub
```

```
Sub printComments comment$
  x=1
  longLine$=Word$(comment$, x, "&#13;&#10;")
  While longLine$ <> ""
    If longLine$ <> "&#13;&#10;" Then
      y=1
      Do
        Do Until Len(line2$) > leng
          line1$=Word$(longLine$, y)
          line3$=replaceStr$(line1$, "&#9;", "    ") 'conve
rt tab
          line1$ = line3$
          line3$=replaceStr$(line1$, "&quot;", chr$(34)) 'q
uotation mark
          line1$ = line3$
          line3$=replaceStr$(line1$, "&lt;", "<") 'lesser t
han
          line1$ = line3$
          line3$=replaceStr$(line1$, "&gt;", ">") 'greater
than
          line1$ = line3$
          line3$=replaceStr$(comment$, "&amp;", "&") 'amper
sand
          comment$ = line3$
        
```

```
        temp$ = line2$ + line1$ + " "
        If len(temp$) > leng Then Exit Do
        y=y+1
        line2$=temp$
    Loop
    line3$=Trim$(line2$)
    Print #main.tb1, line2$
    line2$=""
    Loop While line1$ <> ""
Else
    Print #main.tb1, ""
End If
x=x+1
longLine$=Word$(comment$,x,"&#13;&#10;")
Wend
End Sub

Sub blankLines num
    For x=1 To num
        Print #main.tb1, ""
    Next x
End Sub

Function replaceStr$(original$, toReplace$, replacement$)
    final$ = original$
    If len(original$) > 0 And len(toReplace$) > 0 Then
        pos = instr(original$, toReplace$)
        If pos > 0 Then
            l$ = left$(original$, pos-1)
            r$ = mid$(original$, pos+len(toReplace$))
            final$ = l$ + replacement$ + r$
        End If
    End If
    If instr(original$, toReplace$, 1) > 0 Then
        final$ = replaceStr$(final$, toReplace$, replacement$)
    End If
    replaceStr$ = final$
End Function
```

And for anyone interested here's the file structure:

```
_____<lesson>
|
|      <lesson-title></lesson-title>
```

```
<author></author>
<lesson-comment></lesson-comment>
<lesson-code></lesson-code>

  <chapters>
    <chapter>
      <chapter-title></chapter-title>
      <chapter-comment></chapter-comment>
      <chapter-code></chapter-code>

        <sections>
          <section>
            <section-title></section-title>
            <section-comment></section-comment>
            <section-code></section-code>

              <examples>
                <example>
                  <example-title></example-title>
                  <example-comment></example-
comment>
                  <example-code></example-code>
                </example>
              </examples>
            </section>
          </sections>
        </chapter>
      </chapters>
    </lesson>
```