

Welcome to my tiny Rss parser...I'm trying to create a small rss reader in liberty basic...I don't have any scientific background about programming, but little bit of little bit of that, i'm enjoying my time to write small applications in Liberty Basic (or other basics, but i find liberty basic really basic about GUI applications, is it only me?). Well as i'm writing the code, i'm trying to purify it as much as i can...The code i provide here is able strip most rss tags and print to mainwin...I'll change it by time, to get adapted for a GUI, so i need to place parsed elements to some string variable with index...I hope this will work for all...

See the first part for the URL, receive code from Alycesrestaurant.com

```
GLOBAL rss$
url$="http://rss.cnn.com/rss/cnn_topstories.rss"
localfile$="rss.xml"

a=geturl(url$,localfile$)
a= StripTags(rss$)

Function geturl(url$,localfile$)
uniUrl$ = MultiByteToWideChar$(url$)

if uniUrl$ = "" then
    print "Unable to convert URL to unicode string."
end
end if

'if result = 0, URL is valid
result = ValidURL(uniUrl$)

if result = 0 then
    'download html from url
    Cursor Hourglass
    downloadresult = DownloadToFile(url$,localfile$)
    if downloadresult <> 0 then print "Error downloading ";url$
    Cursor Normal
else
    print "Invalid URL: "; url$
end if

'Now opening the rss file, and binding to local var...
'Will be array for future multiple rss...

open localfile$ for input as #f
```

```
    rss$=input$ (#f, lof(#f))
close #f
End Function
```

```
function StripTags(raw$)
'print only the tags starting with < and ending with >
'According to RSS 2.0 standart we have the following channel data..
'First, start with rss or xml declaration, version...Then
'Channel
'| -Title          Required
'| -Link           Required
'| -Description    Required
'|
'| -Language       Optional
'| -Copyright      Optional
'| -managingEditor Optional
'| -webMaster      Optional
'| -pubDate        Optional
'| -lastBuildDate  Optional
'| -category       Optional
'| -generator      Optional
'| -docs           Optional
'| -cloud          Optional
'| -ttl            Optional
'| -image          Optional-----
'-----
'| -rating         Optional
'|   |><url></url>
'| -textInput      Optional
'|   |<title></title>
'| -skipHours      Optional
'|   |<link></link>
'| -skipDays       Optional
'|   |<width></width>
'|
'|   |<height></height>
'|
'|   |<description></description>
'|
'|
'|
'|
'|
'|
```

```
'
' Elements of items...Items are sub-elements of Channels btw...
'So
'Channel----
'      |---<item>
'      |---<item>
'      |---<item>
'      |---<item>
'      |
'      | -Title
'      | -Link
'      | -Description
'      | -Author
'      | -Category
'      | -Comments
'      | -enclosure
'      | -guid
'      | -pubDate
'      | -source
'But the point is that most rss feeds doesn't follow this sequence of
tags...So, first, we'll remove the tags
'with the information attached to them, and we'll have TAG=Content typ
e of arrays...

channeltags$=
"title,link,description,language,copyright,managingeditor,";_
"webmaster,pubdate,lastbuilddate,category,generator,docs,cloud,ttl,ima
ge,";_
"rating,textinput,skiphours,skipdays,"

itemtags$="title,link,description,author,category,";_
"comments,enclosure,guid,pubdate,source,"

imgtags$="url,title,link,width,height,description,"

while tagend<len(raw$)

tagstart=instr(raw$,"<",tagend)
tagend=instr(raw$,">",tagstart)
taglen=tagend-tagstart+1
'print mid$(raw$,leftbrack,taglen), rightbrack

    if instr(mid$(raw$,tagstart,taglen),"<channel>",0)>0 then
        chcount=1
        print "We found a channel! "
```

```
while word$(channeltags$,chcount,",")<>""  
  
'if instr(raw$,"<" + word$(channeltags$,chcount,",") + ">")<>0 then  
  
    tagstart=instr(raw$,"<" + word$(  
channeltags$,chcount,",") + ">")+len("<" + word$(channeltags$,  
chcount,",") + ">")  
    tagend=instr(raw$,"</" + word$(  
channeltags$,chcount,",") + ">",tagstart)  
    taglen=tagend-tagstart  
  
    if word$(channeltags$,chcount,",")=  
"image" then 'Parsing image...  
  
        itcount=1  
        imgraw$=mid$(raw$,tagstart,taglen)  
  
        while word$(imgtags$,itcount,",")<>""  
  
            imgstart=instr(imgraw$,"<" + word$(imgtags$,itcount,",") + ">")+len(  
"<" + word$(imgtags$,itcount,",") + ">")  
  
            imgend=instr(imgraw$,"</" + word$(imgtags$,itcount,",") + ">",imgstart)  
            imglen=imgend-imgstart  
            print "Channel>Image>";word$(  
imgtags$,itcount,",");">";mid$(imgraw$,imgstart,imglen)  
            itcount=itcount+1  
  
        wend  
        goto [skipimage]  
    end if  
  
    print upper$(word$(channeltags$,chcount,","));  
">>>>";mid$(raw$,tagstart,taglen)  
  
'here, if we have image, seperately we must parse it...  
    [skipimage]  
    'end if  
    chcount=chcount+1  
wend  
  
'Upto here, everything is working fine...Missing parts are GUID and me
```

dia...image tag should be parsed independent...

```
        filepos=instr(raw$,"<item>")

        while instr(raw$,"<item>")<>0
'Loop until there are no items left...

'since channel is finished, cut the raw$ to only size of items...
        currentitem$=mid$(raw$,filepos-1,instr(raw$,"</item>"))
        raw$=right$(raw$,len(raw$)-instr(raw$,"/item>"))
        itemcount=1

        print "New item!":print:print

        while word$(itemtags$,itemcount,",")<>""

                if instr(lower$(currentitem$),"<" + word$(
itemtags$,itemcount,",") + ">")<>0 then
                        tagstart=instr(lower$(
currentitem$),"<" + word$(itemtags$,itemcount,",") + ">")+len("<" + word$(
itemtags$,itemcount,",") + ">")
                        tagend=instr(lower$(
currentitem$),"</" + word$(itemtags$,itemcount,",") + ">",tagstart)
                        taglen=tagend-tagstart
                        print upper$(word$(itemtags$,
itemcount,",")); ">>>>";mid$(currentitem$,tagstart,taglen)
'                        print tagstart,tagend,taglen
                        end if
                        itemcount=itemcount+1
        filepos=1
wend'single item

wend'whole items...

end if 'channel end if...
```

wend

'Upto here, everything is working fine...Missing parts are GUID and me
dia
End Function

Function Window(sizex,sizey,posx,posy)

End Function

```
Function lowercase (string$)
lowercase$=lower$(string$)
End Function
```

```
Function DownloadToFile(urlfile$, localfile$)
  open "URLmon" for dll as #url
  calldll #url, "URLDownloadToFileA", _
  0 as long, _          'null
  urlfile$ as ptr, _    'url to download
  localfile$ as ptr, _  'save file name
  0 as long, _          'reserved, must be 0
  0 as long, _          'callback address, can be 0
  DownloadToFile as ulong '0=success
  close #url
end function
```

```
Function ValidURL(urlfile$)
  open "URLmon" for dll as #url
  calldll #url, "IsValidURL", _
  0 as long, _          'ignored, must be 0
  urlfile$ as ptr, _    'urlfile to check
  0 as ulong, _         'ignored, must be 0
  ValidURL as long
  close #url
end function
```

```
function MultiByteToWideChar$(String$)
  'converts any string into unicode
  CodePage = 0 : dwFlags = 0
  cchMultiByte = -1
  lpMultiByteStr$ = String$
  cchWideChar = len(String$) * 3
  lpWideCharStr$ = space$(cchWideChar)

  calldll #kernel32, "MultiByteToWideChar", _
  CodePage as ulong, _      'CP_ACP=0, ansi code page
  dwFlags as ulong, _      'use 0, flags for character translation
```

```
    lpMultiByteStr$ as ptr, _ 'the ascii string to convert
    cchMultiByte as long, _ 'len of string, -1 for null-
terminated string
    lpWideCharStr$ as ptr, _ 'buffer for returned ansi string
    cchWideChar as long, _ 'size in wide characters of string buffer
    result as long
'returns number of wide characters written to buffer

    if result = 0 then
        MultiByteToWideChar$ = ""
    else
        MultiByteToWideChar$ = left$(lpWideCharStr$, result * 2)
    end if
end function
```

'Updated on 12/12/2009 - Minor Changes