Subject: how to check specific end tag in a xml file?
Posted by ayana on Wed, 21 Mar 2012 10:57:47 GMT
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Hi All,

How to check for a specific end tag in the large XML file while parsing it?

Suppose the file is,

<?xml version="1.0" encoding="UTF-8" standalone="yes" ?>

<!DOCTYPE AddressBook>

<AddressBook>

 <person>

  <name>qw</name>

  <surname>we</surname>

  <address>we</address>

  <email>er</email>

 </person>

 <person>

  <name>rer</name>

  <surname>ty</surname>

  <address>ui</address>

  <email>io</email>

 </person>

 <person>

  <name>oo</name>

  <surname>jlj</surname>

  <address>bh</address>

<email>cft</email>

</person>

</AddressBook>

The user enters a name in an edit field of GUI, if the name entered matches with the gathered text of 'name tag' the corresponding person details should get add to XMLTree.

For Example:

```
while(! p.End)
{

  if ( p.Tag ( "person" ))

   {

    if ( p.Tag ( "person" ))

     {
                                                    if ( p.Tag ( "name" ) )

      {

      if( editfield.name==p.ReadText())
                                                                {
        Add that "<person> to </person>" details to XmlTree
       }


      }


    }


  }


}
```

Thanks in Advance,

-Ayana

Subject: Re: how to check specific end tag in a xml file?
Posted by ayana on Thu, 22 Mar 2012 07:07:43 GMT
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Hi,

Please help me to solve the above problem...

Otherwise, I want to save each person details into different xml files. is that possible for the above AddressBook XML file, if so how?

Regards,

Ayana

Subject: Re: how to check specific end tag in a xml file?
Posted by Sender Ghost on Thu, 22 Mar 2012 09:45:59 GMT
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Hello, Ayana.

ayana wrote on Wed, 21 March 2012 11:57How to check for a specific end tag in the large XML file while parsing it?

ayana wrote on Wed, 21 March 2012 11:57The user enters a name in an edit field of GUI, if the name entered matches with the gathered text of 'name tag' the corresponding person details should get add to XMLTree.

There is XML reference example about methods to parse XML files with XmlParser and XmlNode. As well as AddressBookXML and AddressBookXML2 examples.

I will show you following source code about how to search "name" tag for specified names and changing found "person" data, using XmlNode:
Toggle Spoiler
```
#include <Core/Core.h>

using namespace Upp;

#define TAG_AddressBook "AddressBook"
#define TAG_person "person"
#define TAG_name "name"
```

```
#define TAG_surname "surname"
#define TAG_address "address"
#define TAG_email "email"

String PrintData(const XmlNode& node) {
 const XmlNode& ls = node[0];
 StringBuffer text;

 for (int i = 0, n = ls.GetCount(); i < n; ++i) {
  const XmlNode& ll = ls[i];
  if (ll.IsTag(TAG_person)) {
   text << "- Person:\n";
   const XmlNode& lname = ll[TAG_name];
   if (!lname.IsVoid())
    text << TAG_name << ": " << lname[0].GetText() << '\n';

   const XmlNode& lsurname = ll[TAG_surname];
   if (!lsurname.IsVoid())
    text << TAG_surname << ": " << lsurname[0].GetText() << '\n';

   const XmlNode& laddress = ll[TAG_address];
   if (!laddress.IsVoid())
    text << TAG_address << ": " << laddress[0].GetText() << '\n';

   const XmlNode& lemail = ll[TAG_email];
   if (!lemail.IsVoid())
    text << TAG_email << ": " << lemail[0].GetText() << '\n';

   text << '\n';
  }
 }

 return text;
}

void ChangeXmlText(XmlNode& node, const char *tag, const String& txt) {
 int q = node.FindTag(tag);
 if (q < 0) // Adding new tag in case of not found
  node.Add(tag).AddText(txt);
 else  // Changing found tag
  node.At(q).At(0).CreateText(txt);
}

CONSOLE_APP_MAIN
{
 const Vector<String>& cmdLine = CommandLine();

 if (cmdLine.GetCount() == 0) {
```

```
 Cout() << "Specify XML file to load\n";
 return;
}

String fileName(NormalizePath(cmdLine[0]));

// Loading contents of file to String
const String data = LoadFile(fileName);
if (data.IsVoid()) {
 Cout() << "Error, while loading '" << NormalizePath(fileName) << "' file\n";
 SetExitCode(1);
 return;
}

XmlNode node;
try { // Trying to parse XML file
 node = ParseXML(data);
}
catch (XmlError e) {
 Cout() << "XmlError " << e << '\n';
 SetExitCode(1);
 return;
}

if (node.GetCount() == 0 || node[0].GetTag() != TAG_AddressBook) {
 Cout() << "There is no following tag for XML file: " << TAG_AddressBook << '\n';
 return;
}

Cout() << "Existing data:\n" << PrintData(node);
// The names of persons for changing data
const String names[] = { "qw", "rer", "new name" };
const String text("*"); // some changed data
// Selecting contents of "AddressBook" tag
XmlNode& ls = node.At(0);

for (int j = 0, m = __countof(names); j < m; ++j) { // Iterate through names array
 bool found = false;
 for (int i = 0, n = ls.GetCount(); i < n; ++i) { // Iterate through "AddressBook" tags
  XmlNode& ll = ls.At(i);
  if (ll.IsTag(TAG_person)) { // Checking for "person" tag
   int q = ll.FindTag(TAG_name);
   if (q < 0)
    continue;
   // Selecting contents of "name" tag
   XmlNode& lname = ll.At(q).At(0);
   if (lname.GetText() == names[j]) { // Comparing names
    found = true;
```

```
    // Changing contents of "person" tag
    lname.CreateText(String().Cat() << names[j] << " *");

    ChangeXmlText(ll, TAG_surname, text);
    ChangeXmlText(ll, TAG_address, text);
    ChangeXmlText(ll, TAG_email, text);

    break; // in case of no duplicates
   }
  }
 }

 if (!found) { // Adding new "person" tag with their contents, if name not found
  XmlNode& ll = ls.Add(TAG_person);
  ll.Add(TAG_name).AddText(names[j]);
  ll.Add(TAG_surname).AddText(text);
  ll.Add(TAG_address).AddText(text);
  ll.Add(TAG_email).AddText(text);
 }
}

 Cout() << "Changed data:\n" << PrintData(node);

 fileName = AppendFileName(GetFileDirectory(fileName),
  String().Cat() << GetFileTitle(fileName) << " (changed)" << GetFileExt(fileName));
 // Saving changed XmlNode(s) to different file path
 if (SaveFile(fileName, AsXML(node)))
  Cout() << "Changed file '" << fileName << "' written successfully\n";
 else
  Cout() << "Error, while writing '" << fileName << "' file\n";
}
```

With following XML file:
Toggle Spoiler

```
<?xml version="1.0" encoding="UTF-8" standalone="yes" ?>
<!DOCTYPE AddressBook>
<AddressBook>
 <person>
  <name>qw</name>
  <surname>we</surname>
  <address>we</address>
  <email>er</email>
 </person>
 <person>
  <name>rer</name>
  <surname>ty</surname>
  <address>ui</address>
```

```
  <email>io</email>
 </person>
 <person>
  <name>oo</name>
  <surname>jlj</surname>
  <address>bh</address>
  <email>cft</email>
 </person>
</AddressBook>
```

You will get following output:
Toggle Spoiler
Existing data:
- Person:
name: qw
surname: we
address: we
email: er

- Person:
name: rer
surname: ty
address: ui
email: io

- Person:
name: oo
surname: jlj
address: bh
email: cft

Changed data:
- Person:
name: qw *
surname: *
address: *
email: *

- Person:
name: rer *
surname: *
address: *
email: *

- Person:
name: oo
surname: jlj

address: bh
email: cft

- Person:
name: new name
surname: *
address: *
email: *

Changed file 'C:\AddressBook (changed).xml' written successfully

and changed XML file:
Toggle Spoiler

```
<?xml version="1.0" encoding="UTF-8" standalone="yes" ?>
<!DOCTYPE AddressBook>
<AddressBook>
 <person>
  <name>qw *</name>
  <surname>*</surname>
  <address>*</address>
  <email>*</email>
 </person>
 <person>
  <name>rer *</name>
  <surname>*</surname>
  <address>*</address>
  <email>*</email>
 </person>
 <person>
  <name>oo</name>
  <surname>jlj</surname>
  <address>bh</address>
  <email>cft</email>
 </person>
 <person>
  <name>new name</name>
  <surname>*</surname>
  <address>*</address>
  <email>*</email>
 </person>
</AddressBook>
```

Subject: Re: how to check specific end tag in a xml file?

Hi Sender,

Thanks for your reply.

But, i want to save each person to person tag details into individual XML files in the name of "gathered text of 'name' tag".

Example:

<Xml>
<UUID>f9904fb0dacd1661dc3358c69c032bca</UUID>

<Project_Information>
<ProjectName>erwerw</ProjectName>
<Description>dfg</Description>
<Date>27/03/2012</Date>
</Project_Information>

<InputDataInformation>

<Information>
<Name>Info1</Name>
<Type>jj</Type>
<DataType>fty</DataType>
<Size>45</Size>
<Unit>qerw</Unit>
<Scale>4455</Scale>
</Information>

<Information>
<Name>Info2</Name>
<Type>ww</Type>
<DataType>fer</DataType>
<Size>24</Size>
<Unit>qhy</Unit>
<Scale>1234</Scale>
</Information>

<InputDataInformation>

</Xml>

in the above xml file i want to save each information details to save into two individual xml files, in the name of "gathered text of 'Name' tag".
Like, Info1.xml and Info2.xml

Inside Info1.xml file, i want the following to be get saved

<Information>
<Name>Info1</Name>
<Type>jj</Type>
<DataType>fty</DataType>
<Size>45</Size>
<Unit>qerw</Unit>
<Scale>4455</Scale>
</Information>

Inside Info2.xml file,

<Information>
<Name>Info2</Name>
<Type>ww</Type>
<DataType>fer</DataType>
<Size>24</Size>
<Unit>qhy</Unit>
<Scale>1234</Scale>
</Information>

With Regards,

Ayana

Subject: Re: how to check specific end tag in a xml file?
Posted by ayana on Tue, 27 Mar 2012 11:22:46 GMT
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Hello All,

Please help me to accomplish above task.

Regards,

Ayana

Subject: Re: how to check specific end tag in a xml file?
Posted by Sender Ghost on Tue, 27 Mar 2012 15:37:10 GMT
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ayana wrote on Tue, 27 March 2012 06:49But, I want to save each person to person tag details

into individual XML files in the name of "gathered text of 'name' tag".
ayana wrote on Tue, 27 March 2012 13:22Please help me to accomplish above task.
What you asked for is already inside examples. This is general examples, which not adapted for your specific case, of course.

There is following source code to accomplish your task (in some way):

```
#include <Core/Core.h>

using namespace Upp;

CONSOLE_APP_MAIN
{
 const Vector<String>& cmdLine = CommandLine();

 if (cmdLine.GetCount() == 0) {
  Cout() << "Specify XML file to load\n";
  return;
 }

 String fileName(NormalizePath(cmdLine[0]));

 XmlNode node;
 {
  // Loading contents of file to String
  const String data = LoadFile(fileName);
  if (data.IsVoid()) {
   Cerr() << "Error, while loading '" << NormalizePath(fileName) << "' file\n";
   SetExitCode(1);
   return;
  }

  try { // Trying to parse XML data
   node = ParseXML(data);
  }
  catch (XmlError e) {
   Cerr() << "XmlError: " << e << '\n';
   SetExitCode(1);
   return;
  }
 }

 const XmlNode& linput = node["Xml"]["InputDataInformation"];
 if (linput.IsVoid()) {
  Cerr() << "There is no Xml/InputDataInformation tag\n";
  SetExitCode(1);
  return;
 }
```

```
 const String outputPath = "output";
 if (!DirectoryExists(outputPath))
  if (!RealizeDirectory(outputPath)) {
   Cerr() << "Error while creating '" << outputPath << "' directory\n";
   SetExitCode(1);
   return;
  }

 for (int i = 0, n = linput.GetCount(); i < n; ++i) {
  const XmlNode& linfo = linput[i];
  if (!linfo.IsTag("Information"))
   continue;

  const XmlNode& lname = linfo["Name"];
  if (linfo.IsVoid())
   continue;

  const String name = lname[0].GetText();
  if (name.IsEmpty()) {
   Cerr() << "Empty name for " << i << " tag\n";
   continue;
  }

  const String outputFile = AppendFileName(outputPath, name + ".xml");
  if (!SaveFile(outputFile, AsXML(linfo, XML_HEADER))) {
   Cerr() << "Error, while saving '" << outputFile << "' file\n";
   SetExitCode(1);
   return;
  }
 }
}
```

Also, you could find full package (with correct input XML file) inside attachment archive.

File Attachments

1) SplitXml.zip, downloaded 389 times