Version <% { var sharpDocxAssembly = typeof(DocumentBase).Assembly;  
var fvi = System.Diagnostics.FileVersionInfo.GetVersionInfo(sharpDocxAssembly.Location);  
Write(fvi.FileVersion); } %>  
egonl  
December 2017

SharpDocx

# Summary

SharpDocx is a library to programmatically create Word documents. It’s inspired on Web technologies like ASP.NET. Developers familiar with classic ASP.NET should feel right at home.

With SharpDocx, the developer first creates a view. This is a Word document which also contains C# code. This is usually done in Microsoft Word.

Next, the developer programmatically creates new documents based on this view. The views can optionally be supplied with a user defined model. This is usually done in Visual Studio using C#.

Out of the box SharpDocx supports most standard scenario’s, like inserting text, tables and images. If something more specific is required, developers can extend views in order to implement those requirements.

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# The basics

At any point in the text you can insert C# statements. Like right <% var i = 1; %>here.

The result looks like this:



## Write method

If you want to display the value of i, you can use the Write method. Right now, i is <% Write(i); %>.

There’s also a shorthand notation for the Write method: i is still <%= i %>.

You can insert line breaks by using ‘\n’:

<%= "This paragraph\ncontains two\nline breaks" %>.

## Conditional content

You can use an if statement to display conditional content.

<% if (true) { Write("This **will** *be* displayed."); } %>

In this case, any formatting will be lost because the code parser ignores any formatting.

If you want to conditionally display text with formatting, use two code blocks and place the text between curly brackets, like this.

<% if (true) { %>This **will** *also* be displayed.<% } %>

If you want, you can span multiple elements. E.g.

<% if (DateTime.Now.Second % 2 == 0) { %>

The diverging pronunciation of tomato (though not so much potato) is primarily one of regional dialect.

The pronunciation 'tuh-MAH-toh' is the standardpronunciation in the UK and is accepted in the US regions of New England along with parts of the lower East Coast, while 'tuh-MAY-toh' is found almost everywhere else.  
 Jun 22, 2015

<% } %>

## Loops

If you want to add something in a loop, you should do so programatically. This example does loop, but doesn’t add anything to the document:

<% for (i = 0; i < 10; ++i) { %>

The value of i is **<%= i %>.**

<% } %>

In the next loop we’ll call the AppendParagraph method, which *will* insert new paragraphs:

<% for (i = 0; i < 10; ++i) { %>

The value of i is **<%= i %>.**<% AppendParagraph(); %>

<% } %>

## Tables

Design your tables in Word, and create rows using the AppendRow method.

<% for (i = 1; i <= 10; ++i) { %>

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **i \* 1** | **i \* 2** | **i \* 3** | **i \* 4** | **i \* 5** | **i \* 6** | **i \* 7** | **i \* 8** | **i \* 9** | **i \* 10** |
| **<%= i %>** | <%= i \* 2 %> | <%= i \* 3 %> | <%= i \* 4 %> | <%= i \* 5 %> | <%= i \*6 %> | <%= i \* 7 %> | <%= i \* 8 %> | <%= i \* 9 %> | <%= i \* 10 %> <% AppendRow(); %> |

<% } %>

## Images

Insert images using the Image method.

<% Image("test1.png"); %>

If only a file name is specified, SharpDocx searches this file in a directory specified by the ImageDirectory property. Right now this property has been set to ‘<%= ImageDirectory %>’.

The Image method accepts a second optional parameter that specifies the relative size of the image. Here’s <% Image("test1.png", 15); %> at 15%.

Images that are too wide to be displayed at 100% are automatically scaled back. Here’s an example:

<% Image("test2.png"); %>

## Replacing text

If you want to replace text, you can use the Replace method.

<% Replace("{text to replace}", "replaced text"); %>

This will replace *all* occurrences of the specified string.

Here’s the **{text to replace}**. And here’s some more {text *to* **replace**}.

<% /\* Replace("e", "é"); \*/ %>

## The Map

The Map maps OpenXmlElements to plain text and vica versa. It’s being used internally for finding the C# code in documents, among other things. At the moment Map.Text looks something like this:

<%= Map.Text.Substring(0,500) %> …

## Referencing assemblies and importing namespaces

If you want to use your own models in a view, use the Assembly and Import directives to get access to them.

You can add a reference to an assembly with the Assembly directive. Directives always start with < %@.

<%@ Assembly Name="System.Xml" %>  
<%@ Assembly Name="System.Xml.Linq" %>

Import namespaces with the Import directive.

<%@ Import Namespace="System.Xml.Linq" %>

Now you can use types in System.Xml.Linq. Let’s read some news for nerds.

<% try  
{  
 var atom = XDocument.Load("http://rss.slashdot.org/Slashdot/slashdotMainatom");

foreach (var entry in atom.Descendants("{http://www.w3.org/2005/Atom}entry"))  
 { %>

**<%=** **entry.Element("{http://www.w3.org/2005/Atom}title").Value %>**<%= entry.Element("{http://www.w3.org/2005/Atom}summary").Value.Substring(0,200) %><% AppendParagraph(); %>

<% }  
}  
catch (Exception ex)  
{   
 Write("Error: " + ex.Message);   
} %>

In a real world scenario you wouldn’t fetch data or have this much code in a view. But hey, this is just an example.