Implementing Code Examples Guide

The Argotic Syndication Framework includes compiled help documentation to help developers better understand the framework feature set and provides guidance when navigation the API entities. This documentation is generated by an external tool that uses the framework assemblies and associated XML documentation files. This guide is meant to provide guidance on how project contributors can include example code within this generated documentation.

Example code can be referenced within XML code documentation using the **<code>** tag, which is a sub-element of the **<example>** tag.

The XML documentation fragment above demonstrates the way you will typically include code examples within the framework classes you are documenting. You add an **example** tag, with child **code** tag. The *lang* attribute of the code tag specifies the language the code example is written in, while the *title* attribute provides a friendly title for the example code.

The parent code tag is then given a child **code** tag that is used to reference the external code example. This child code tag has two attributes, the *source* attribute which is used to reference the external code file that contains the example code, and the *region* attribute, which indicates what comment region to be imported. The project uses this model so that all example code that is included in the documentation exists in a class library that is compiled with the framework to ensure that it is a workable example. This model also improves the readability of the XML documentation, as code examples can be quite large and difficult to format.

This is an example of a how to document a method using this methodology:

Method with code example:

Code example that is being referenced:

```
/// <summary>
/// Provides example code for the SyndicationDiscoveryUtility.ConditionalGet(Uri, DateTime, string) method
/// </summary>
public static void ConditionalGetExample()
{
```

```
#region ConditionalGet(Uri source, DateTime lastModified, string entityTag)
       // Local members
      Uri source
                                  = new
      Uri("http://www.pwop.com/feed.aspx?show=dotnetrocks&filetype=master");
      DateTime lastModified;
       string entityTag;
       // Retrieve the modification date and entity tag information
      HttpWebRequest webRequest = (HttpWebRequest)WebRequest.Create(source);
      lastModified
                                 = webResponse.LastModified;
       entityTag
                                  = webResponse.Headers[HttpResponseHeader.ETag];
              Typically the consumer would store the modification date and entity tag information for
              the resource, and some amount of time passes. Consumer can now use a conditional GET
              operation to determine if the web resource has changed since it was last retrieved. This
              minimizes bandwidth usage significantly.
       //----
       // Determine if web resource has been modified
       HttpWebResponse conditionalResponse = SyndicationDiscoveryUtility.ConditionalGet(source,
       lastModified, entityTag);
       if (conditionalResponse != null)
              // Web resource has been modified since last retrieval.
       #endregion
}
```

Notice that the example code to be included must be wrapped by a code #region with the unique name for the referenced code example. The best practice for naming the region you will reference is to use either the method signature or class name, depending on what you are documenting. This approach to including code examples within documentation allows us to separate the code examples from the documented entities, ensures that code examples will at a minimum compile for users, and improves the maintainability and readability of the codebase.

The project solution is structured to provide class libraries that will contain the code examples being referenced by the documented framework entities. You will find the class library to add your example code to at {Project Root}\Documentation\{.NET Framework Version}\CodeExamplesLibrary. Please be aware of where the class you are documenting is relative to the example code file you are referencing, as an invalid path will result in the documentation generation process failing.

The project uses the *Microsoft Sandcastle* and *Sandcastle Help File Builder* tools to generate our compiled and help documentation.

Resources:

XML Documentation Comments Guide Microsoft Sandcastle Sandcastle Help File Builder