# Creating Classes from XML (ComicVine)

Using the API, generate xml files of each method that we want a class for. Each search method and resource should be used to create an xml file of each type. I found that frequently the xml file would not be formatted correctly, angle brackets would be missing or tags not closed properly. Opening the xml file in visual studio and formatting the document allowed me to find each issue quickly and easily.

Using the xsd.exe tool at C:\Program Files\Microsoft.NET\SDK\v2.0 64bit\Bin, create an xsd file of each xml file using the command: xsd [filename].xml. This command will use the xml file to deduce what the xsd file should be. It is important to have a large dataset defined as the more data xsd has to define the data definition, the better.

The generated xsd file cannot be used to create a c# class without a modification. The first array type is not handled by xsd correctly and will cause runtime errors when deserializing the xml. The issue is explained here: <http://support.microsoft.com/kb/2486643>. The solution is to include one dummy record inside the first array definition inside the xml file. The definition should look like the following: <xs:element minOccurs="0" name="dummyElement" nillable="true" type="xs:string"/>

It is important to use a namespace to differentiate between classes. The xsd tool will use the outermost bounding element to name the class and since all ComicVine outer elements are <results>, the corresponding class names will all be result. Using a namespace will allow you to uniquely identify each result set. Use the following command to create the c# classes used for xml deserialization: xsd [filename].xsd /n:[namespace] /classes