FXCop tool:

Code analysis tool

Runs on .net DLLs using reflections.

Here we check two things:

1. Existing rules
2. Custom rules.

Rules are nothing but checks you want to before the application is deployed.

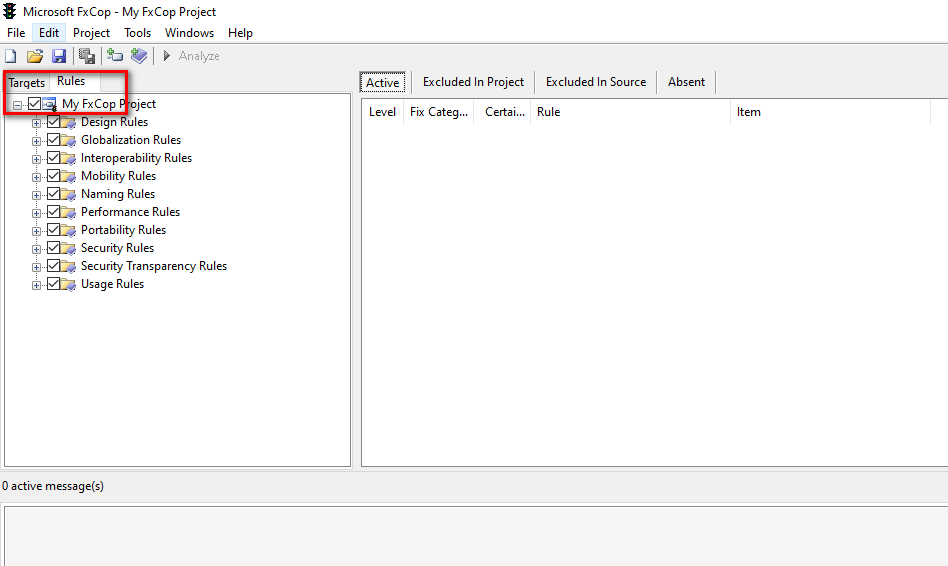
Eg: Db connection once the connection is opened you have to close before it effect the system performance.

File stream is opened for reading but it never closed

Methods name should be a pascal notation

Properties should be a pascal notation

Private fields begin with \_ and should be camel notation.



Target indicates the DLL we want to analyse

Rules: set of rules to be check with respect to the target DLL.

What fx cop does is takes a set of rules and then fires o the DLL then provides us with the result of the code review indicating id the code written by us adhere to the policies.

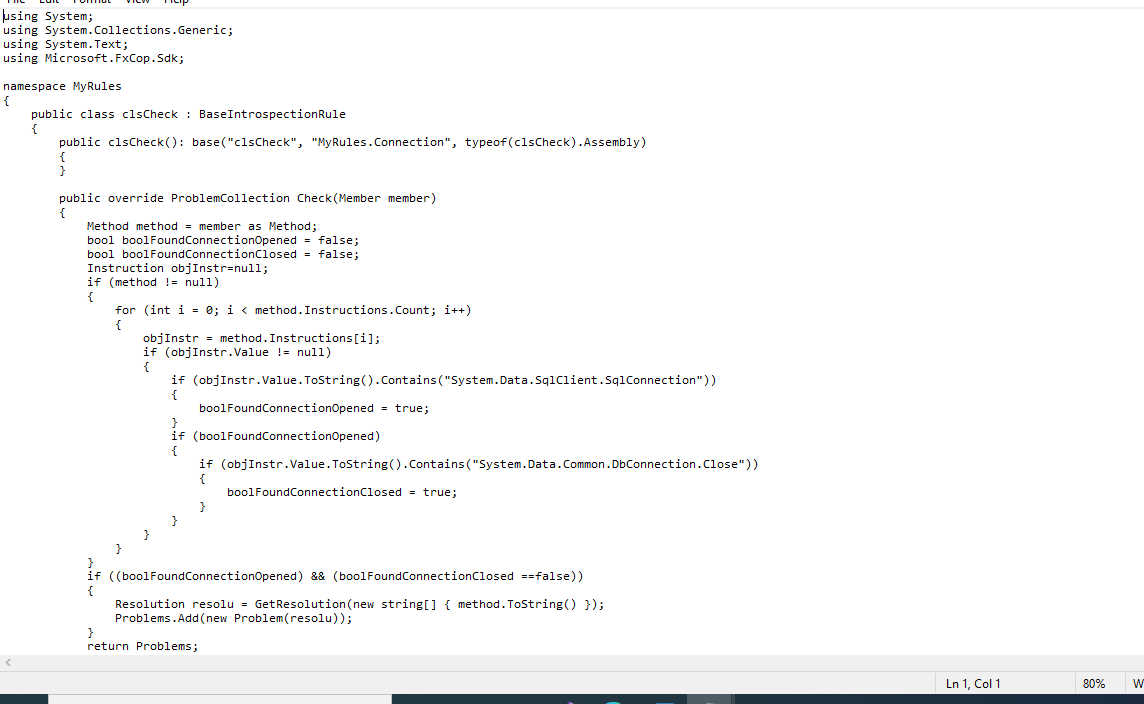
**Creating a custom rule:**

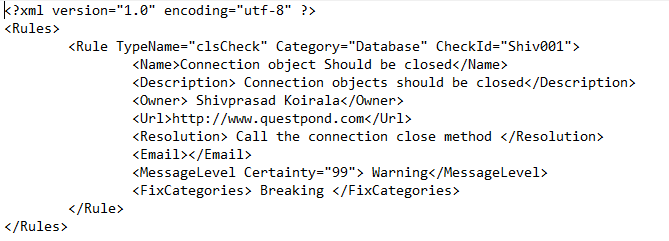
Steps goes as follows

1. Create a class library project using VS
2. Refer fxcopSdk.dll inside this project refer the Microsoft.FxCop.Sdk reference inside your project.
3. Extend BasicInterspectionRule Class
4. In default constructor of the rule class you have to call the base constructor that will take 3 parameter

Class name as string, XML rules mapping file, assembly type of the current class.

1. Override the check method of the base class which returns problem collections and member as parameter





Style cop:

Used only for the C# and run directly on the c# code

Pure source code analysis tool

Treat every file code file to be checked is treated as document and parse through the document to do analysis on the document.

Install style cope

Go to project

Right click on the project

Run style code

Style cope setting we get as option result ill be generated in output window of the VS

We can also make our own rule here

New project we need to make to create rule same as fx cope

To the project I have to add Microsoft.stylecop .dll

Then refer name sapces

Microsoft.stylecop

Microsoft.stylecop.sharp

So each document source need to be analysed

Your rules class need to implement the source analyser

And decorate the class with source analyser of c#

csParser

And override AnalyzeDocument method which takes code document as parametre