



Visual Studio Unit Testing Framework

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The **Visual Studio Unit Testing Framework (MSTest)** is a unit testing framework from Microsoft.

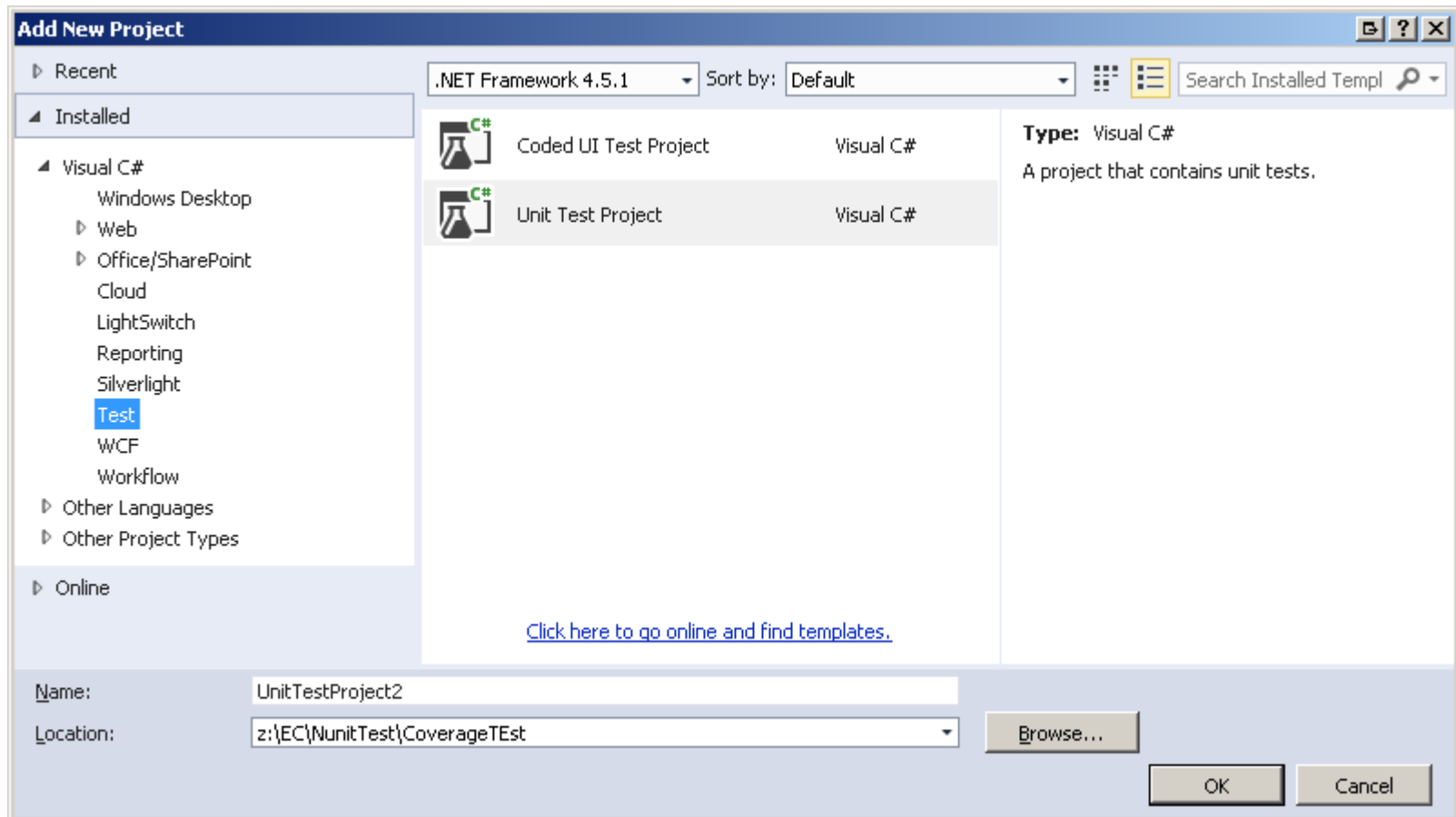
It is **included in Visual Studio** and you access it's attributes and classes In this namespace:

`Microsoft.VisualStudio.TestTools.UnitTesting`

Tests written using this library can be executed in Visual Studio or using the **MSTEST.exe** command line tool.

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The easiest way to get started using MSTest is by creating a new Visual Studio Test Project



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This will create a new project with the correct references and a sample starting test file:

```
using System;
using Microsoft.VisualStudio.TestTools.UnitTesting;

namespace UnitTestProject1
{
    [TestClass]
    public class UnitTest1
    {
        [TestMethod]
        public void TestMethod1()
        {
        }
    }
}
```

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Differences between MSTest and NUnit attributes

Description	NUnit	MSTest
Identifies a test class	[TestFixture]	[TestClass]
Identifies a test	[Test]	[TestMethod]
Method to run before each test	[SetUp]	[TestInitialize]
Method run after each test	[TearDown]	[TestCleanup]
Method to run once before running the test in a class	[TestFixtureSetUp]	[ClassInitialize]
Method to run once after running all the tests in a class	[TestFixtureTearDown]	[ClassCleanup]
Method to run once before any of the test in the given assembly	n/a	[AssemblyInitialize]
Method to run once after any of the test in the given assembly	n/a	[AssemblyCleanup]

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MSTest supports fewer Assert methods than Nunit.

AreEqual
AreNotEqual
AreNotSame
AreSame
Fail
Inconclusive
IsFalse
IsInstanceOfType
IsNotInstanceOfType
IsNotNull
IsNull
IsTrue
ReplaceNullChars

Quick exercise

Try to make a test suite with MSTest

Either do something you did before with NUnit or come up with something else. Just to try another test framework.