

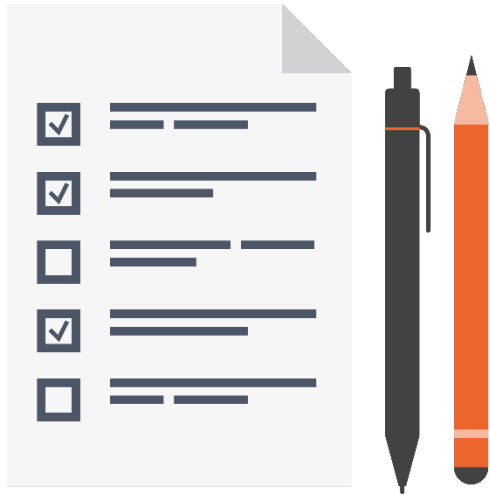
Writing Less Test Code and Improving Test Maintenance



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Overview



Maintainable “refactor-safe” test code

Auto anonymous data in xUnit.net
parameterized tests

Auto mocking with Moq & Rhino Mocks

Combining auto data and auto mocking

Refactoring with Manual Test Data Creation

Change production code

Test code compilation errors

Manually fix errors



Creating Refactor-Safe Test Code

Refactor manual tests to AutoFixture

Change production code

No fixes required in test code

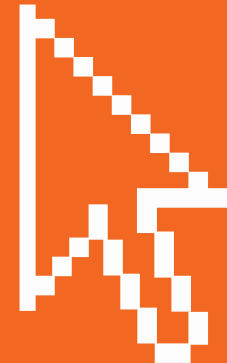


Parameterized xUnit.net Tests with Anonymous Data

Refactor individual tests to [InlineData]

[AutoData] for anonymous data

[InlineAutoData] for partial data



Auto Mocking with Moq

Manual Moq Mock<IEmailGateway>()

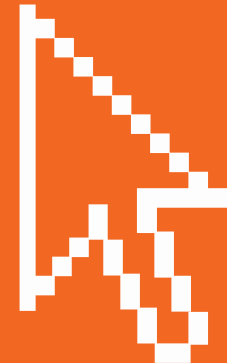
AutoFixture EmailMessageBuffer error

AutoMoqCustomization()

fixture.Freeze()



Auto Mocking with Rhino Mocks

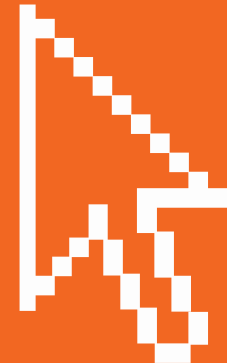


Combining Auto Mocking and Auto Data in xUnit.net

Creating an AutoMoqDataAttribute

Reduce arrange phase code

[Frozen] attribute on mock gateway



Summary



Maintainable “refactor-safe” test code
xUnit.net [AutoData] & [InlineAutoData]
AutoMoqCustomization()
AutoRhinoMockCustomization()
[AutoMoqData] & [Frozen]

Resources and Further Learning



<https://github.com/AutoFixture/AutoFixture>

Mark Seemann:

<http://blog.ploeh.dk/>

<https://twitter.com/ploeh>

NUnit & xUnit.net Pluralsight courses