



deliver more than expected

www.twitter.com/Telerik

www.facebook.com/Telerik

TEST DRIVING ASP.NET MVC

Philip Japikse (@skimedic)

phil.japikse@telerik.com

www.skimedic.com/blog

MVP, MCSD.Net, MCDBA, CSM, CSP
Patterns & Practices Evangelist, Telerik



TELERIK

DELIVER MORE THAN EXPECTED

One-stop shop for .NET tools & UI components



UI Components

Dev Tools

QA/PM Tools



www.telerik.com

Plan. Build. Test.

WHO AM I?

- Patterns & Practices Evangelist, Telerik, Inc.
- Microsoft MVP, MCSD, MCDBA, CSM, CSP
- Developer().Speaker().Writer()
- Lead Director, Cincinnati .NET User's Group
- Founder, Agile Conferences, Inc.
- Columnist, Developer.com



TOOLING

- Unit Test Frameworks
 - MSpec
 - NUnit
 - MbUnit/Gallio
- MVCContrib
- Test Studio Framework



MSPEC

- Context Specification style Behavior Driven Development Framework
 - Loosely Based on RSpec



SAMPLE SPECIFICATION

```
[Subject("SampleConcerns"), Tags("Sample")]
public class When_Doing_Something_In_Mspec
{
    //Arrange
    static Sample _sut;
    static string _expected;
    static string _result;
    Establish context = () =>
    {
        _sut = new Sample();
        _expected = "Foo";
    };
    //Act
    Because Something_action_was_exerted =
        () => _result = _sut.MethodToTest();
    //Assert
    It Should_Return_Foo =
        () => Assert.AreEqual(_expected, _result);
}
```



TEST STUDIO UI TEST FRAMEWORK

- Framework for User Interface Testing

```
[Test]
public void Should_Fail_Log_In_With_Bad_Username_Or_Password_IE()
{
    // Pass in 'true' to recycle the browser between test methods
    Initialize(false);
    Manager.LaunchNewBrowser(BrowserType.InternetExplorer);
    ActiveBrowser.NavigateTo("http://localhost:1105/");
    Find.ByContent<HtmlAnchor>("Log On", FindContentType.InnerText).Click();
    Find.ByName<HtmlInputText>("Username").Text = "admin";
    Find.ByName<HtmlInputPassword>("Password").Text = "foo";
    Find.ByAttributes<HtmlInputSubmit>("Value=Log On").Click();
    Assert.IsTrue(ActiveBrowser.ContainsText("The user name or password provided is
incorrect"));
    // Shuts down WebAii manager and closes all browsers currently running
    // after each test. This call is ignored if recycleBrowser is set
    Cleanup();
}
```



MVC CONTRIB

- Provides helpers for abstracting
 - HttpContextBase, HttpRequestBase
 - Routing
 - Route(), ShouldMapTo, OutBoundURL
 - Plus many more



JUSTMOCK FREE EDITION

- Mocking Framework for abstracting dependencies away from the System Under Test

```
_repository =  
    Mock.Create<ICategoryRepository>(Behavior.Strict);  
Mock.Arrange(()=>_repository.GetAll())  
    .Returns(_categories).OccursOnce();  
_controller = new CategoryListController(_repository);
```



TESTING

- Controllers
 - Views
 - ViewData
 - Redirect
 - With Mocking for DI
 - Attributes
- Routes
 - Incoming
 - Outgoing
 - Non-basic Routes
- UI Testing
- Creating Custom Test Project



RESOURCES

- Gallio + MbUnit:
 - <http://www.gallio.org>
- MSpec:
 - <http://github.com/machine/machine.specifications>
- JustMock:
 - <http://www.telerik.com/products/mocking.aspx>
- Test Studio Framework:
 - <http://www.telerik.com/community/download-free-products.aspx>
- Telerik Extensions for ASP.NET MVC:
 - <http://www.telerik.com/community/download-free-products.aspx>
- Pro ASP.NET MVC3 Framework:
 - <http://www.apress.com/9781430234043>



CONTACT ME

- phil@telerik.com
- www.skimedic.com/blog
- www.twitter.com/skimedic

- Telerik
- www.twitter.com/Telerik
- www.facebook.com/Telerik

