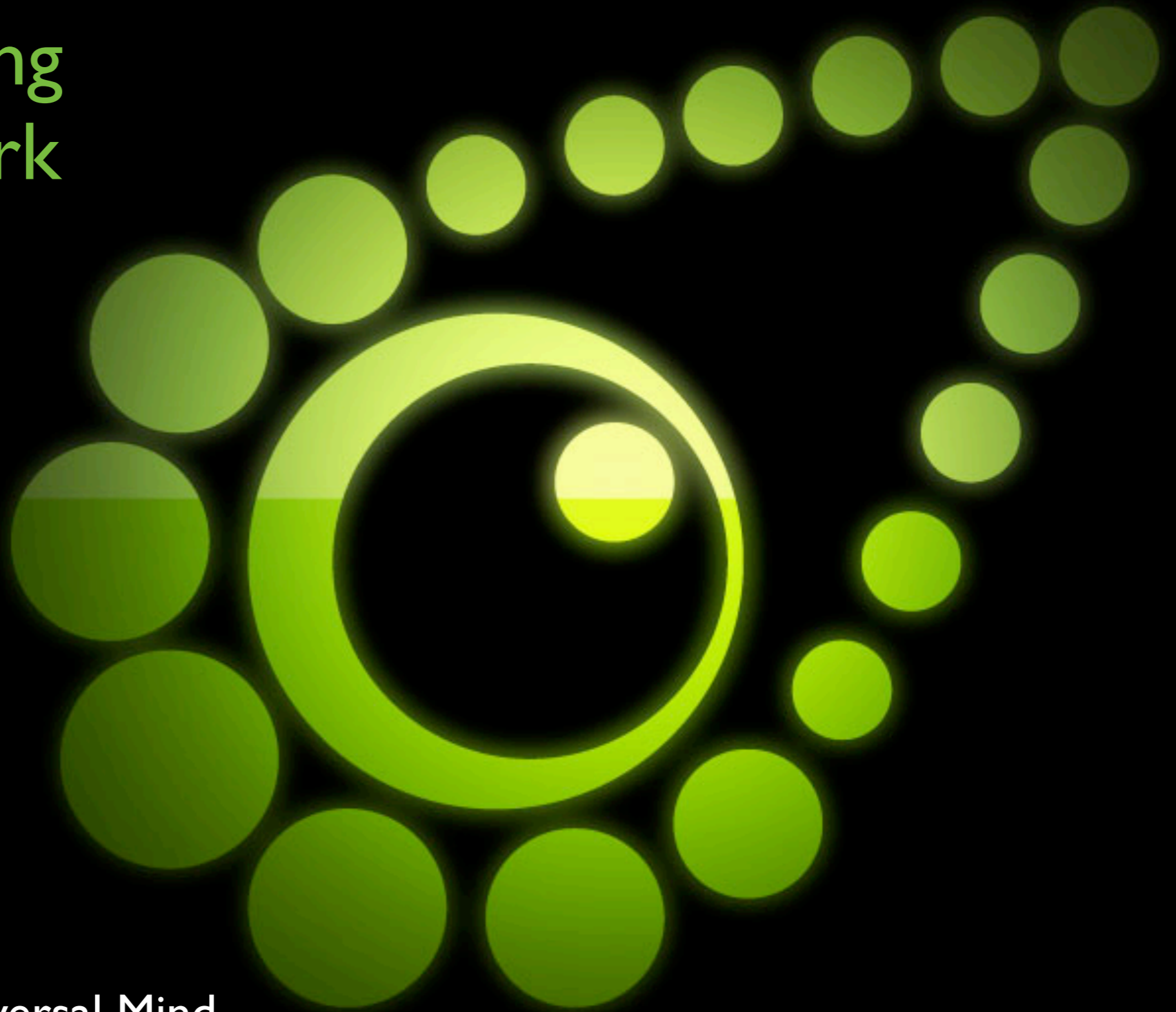


FLEXUNIT 4

Unit Testing Framework



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Outline

- What is FlexUnit?
- Why Test?
- FlexUnit 4 Feature Overview
- Examples
- FlashBuilder 4 Support
- Additional Resources

What is FlexUnit?

FlexUnit Runner powered by Adobe Consulting

TEST CASES

🔍 *Type filter*

Case	Result
▶ TestASComponentUse	✔
▶ TestSynchronousSetUpTearDown	✔
▶ TestBeforeAfterOrder	✔
▶ TestBeforeAfterClassOrderAsync	✔
▶ TestBindingUse	✔
▶ TestMXMLComponentUse	✔

- “FlexUnit is a unit testing framework for Flex and ActionScript 3.0 applications and libraries. It mimics the functionality of JUnit, a Java unit testing framework, and comes with a graphical test runner.” - opensource.adobe.com

Why Test?

- Sane APIs
- Move from *guessing* to *knowing*
- Verify Fixes

- Confidence!

What's New in FlexUnit 4?

- Test Metadata
- Before and After
- BeforeClass and AfterClass

```
[Test]
public function testThatSomethingWorks():void
{
    // Exercise a portion of code
}
```

```
[Before]
public function runBeforeEveryTest():void
{
    // Executes before each test in class
}
```

```
[After]
public function runAfterEveryTest():void
{
    // Executes after each test in class
}
```

```
[BeforeClass]
public static function initializeClass():void
{
    // Run once for the class before defined tests execute
}
```

```
[AfterClass]
public static function cleanupAfterClass():void
{
    // Run once for the class after its tests complete
}
```

What's New in FlexUnit 4?

- Exception Handling
- Ignore
- Async

```
[Test( expected="example.SomeError" )]  
public function testThatErrorIsThrown():void  
{  
    something.potentiallyThrowError();  
}
```

```
[Ignore( "Not ready to run yet." )]  
public function testStillBeingWritten():void  
{  
    // ...  
}
```

```
[Test( async, timeout="500" )]  
public function testThatEventDataIsCorrect():void  
{  
    // ...  
}
```

What's New in FlexUnit 4?

- Hamcrest Assertions
- Suites and RunWith
- User Defined Parameters

```
[Test]
public function testContains():void
{
    var values:Array = [ "a", "b", "c" ];
    assertThat( values, hasItems( "a", "c" ) );
}
```

```
[Suite]
[RunWith( "org.flexunit.runners.Suite" )]
public class AllTests
{
    public var ref:ExampleClassTest;
}
```

```
[Test( description="Verify input.", issueID="133" )]
public function testEmptyInputIsHandledGracefully():void
{
    // ...
}
```

What's New in FlexUnit 4?

- User Interface Facade

```
[Before( async, ui )]
public function setUp():void
{
    textInput = new TextInput();
    Async.proceedOnEvent( this,
                        textInput,
                        FlexEvent.CREATION_COMPLETE );

    UIImpersonator.addChild( textInput );
}
```

- Other Features

- Theories
- DataPoints
- Assumptions

Examples

- Test Case and Suite

PersonXmlTest, ExampleSuite

Examples

- FlashBuilder 4 Support

Examples

- Async

AsyncExampleTest

Examples

- User Interface Facade
ExampleFormTest

Examples

- Continuous Integration
build.xml, CListener

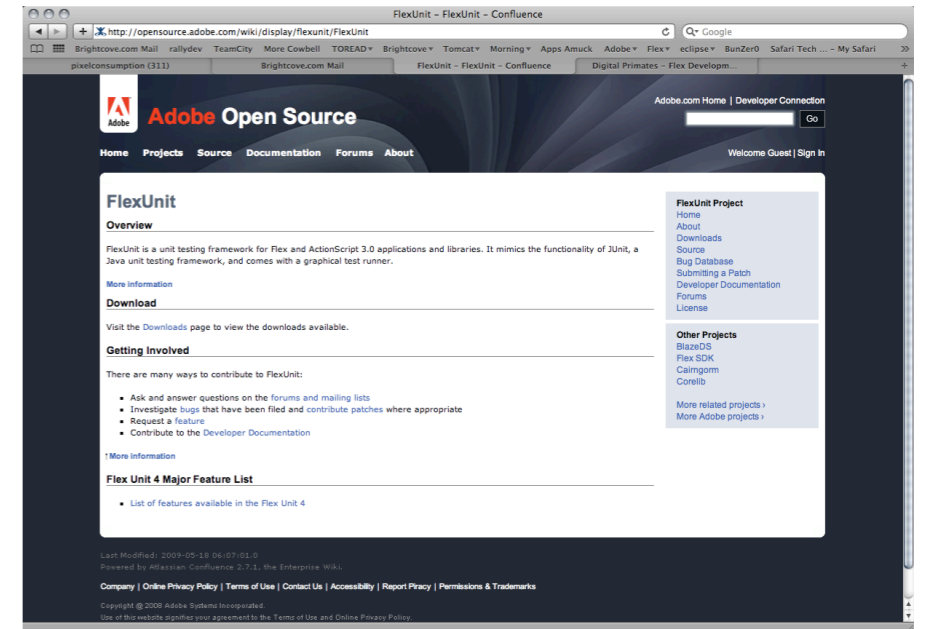
Examples

- Theories, DataPoints, Assumptions

TheoryDataPointAssumptionTest

Additional Resources

- <http://opensource.adobe.com>
- [FlexUnit Downloads](#)
- [Hamcrest](#)
- [Michael Labriola's FlexUnit Category](#)
- [FlexUnit Forums](#)



Thanks!

- Questions?
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