

Adobe Flex 3: Advance Development is a combination of three courses:

Flex 3: Using ActionScript 3

Flex 3: Introducing Cairngorm

Flex 3: Architecting Applications with Cairngorm

Duration: 4 days

Time: 10am - 6pm. Breaks are scheduled throughout the day and lunch is typically scheduled between 12-1pm

Course Materials: Vendor Authorized Courseware provided

Locations: Reston, VA / On-Site

Related Courses: Flex 3 Developing Rich Client Applications

Flex 3: Using ActionScript 3

Description

Flex 3: ActionScript 3 is a comprehensive introduction to the ActionScript 3 scripting language, taught in context of Adobe Flex 3. Beginning with simple declarative statements and core syntax, and moving through control and data structures, by course completion you will have learned intermediate Object Oriented Programming, including static classes and interfaces.

This course is designed to comprehensively introduce the ActionScript 3 programming language. To gain the most from this class, you should:

- * Have already attended the Flex 3: Rich Client Applications training course, or have equivalent experience with using MXML in Adobe Flex 3
- * Be familiar with using Adobe Flex Builder 3

Course Outline

Introducing Flex 3: Developing Rich Client Applications

- * Introducing Mastery Learning
- * Understanding the Course Format
- * Reviewing the course prerequisites
- * Reviewing the course outline
- * Setting up the application files

Introducing ActionScript 3.0 Syntax

- * Understanding basic syntax
- * Declaring variables and their type
- * Data type conversion
- * Using language operators
- * Mathematical operators
- * Instantiating objects
- * Creating and populating instances of the Array class
- * Working with generic objects ("associative arrays")
- * Using the ArrayCollection class

Learning ActionScript 3.0 Control Structures

- * Manipulating String data
- * Using the Alert class
- * Using Conditional Statements
- * Using switch/case statements
- * Using the Date class
- * Working with iteration (looping) statements
- * Writing and using user defined functions
- * Separating and including ActionScript and MXML files

Object Oriented Programming in ActionScript 3.0

- * Introducing Object Oriented Programming Terminology
- * Writing a class definition
- * Declaring class methods
- * Re-using code through inheritance
- * Writing and using an interface
- * Using static classes and methods to persist local data
- * Understanding static methods
- * Storing data using the static SharedObject class

Flex 3: Introducing Cairngorm

Description

Flex 3: Introducing Cairngorm surveys the core concepts behind the Cairngorm RIA micro-architecture by re-factoring the application taught and built in the Flex 3: Rich Client Applications training course.

This course is designed to introduce the core concepts behind the Cairngorm RIA micro-architecture to experienced developers who are new to Adobe Flex 3. To gain the most from this class, you should:

- * Have already taken the Flex 3: Rich Client Applications training course, or have equivalent experience using MXML and ActionScript 3
- * Be familiar with basic Object Oriented Programming in ActionScript 3

Course outline

Introducing Flex 3: Introducing Cairngorm

- * Introducing Adobe Cairngorm
- * Understanding the purpose of Adobe Cairngorm
- * Reviewing the benefits of using Cairngorm
- * Learning about the components of Cairngorm
- * Using Cairngorm in Flex RIAs
- * Identifying roles of code
- * Refactoring code to Cairngorm layers and classes
- * Reviewing benefits of Cairngorm refactoring
- * Implementing the ModelLocator
- * Using the ModelLocator
- * Implementing the ServiceLocator
- * Using the ServiceLocator
- * Implementing Cairngorm events
- * Introducing the concept of Business Events
- * Using a Cairngorm event
- * Implementing Commands
- * Using the Command
- * Implementing the FrontController
- * Using the FrontController
- * Implementing Delegates
- * Building a Cairngorm Delegate
- * Using the Cairngorm components

Flex 3: Architecting Applications with Cairngorm

Description

Flex 3: Architecting Applications with Cairngorm is designed to thoroughly introduce the core concepts behind and standard implementations used within the Cairngorm RIA micro-architecture.

This course is designed to teach experienced Adobe Flex developers how to implement the Cairngorm RIA micro-architecture. To gain the most from this class, you should:

- * Be thoroughly familiar with MXML and ActionScript 3
- * Be experienced with Object Oriented Programming in ActionScript 3
- * Be familiar with design pattern oriented programming

Course Outline

Introducing Flex 3: Developing Rich Client Applications

- * Introducing Mastery Learning
- * Understanding the Course Format
- * Reviewing the course prerequisites
- * Reviewing the course outline
- * Setting up the application files

Converting an Application to use Cairngorm MVC

- * Review Organization and Coupling Concerns
- * Reviewing Organization Changes
- * Reviewing Refactoring Tasks

Architecting the Model Layer

- * Introducing the Model Layer in MVC
- * Understanding the Model Layer as a Concept
- * Understanding the Model Layer as a Structural Organization
- * Introducing the ModelLocator Pattern
- * Introducing the AS3 Singleton design pattern
- * Understanding the purpose of the ModelLocator pattern
- * Reviewing what constitutes a ModelLocator class
- * Using a ModelLocator singleton in the View layer
- * Exploring the Benefits of Using the ModelLocator & Business Objects
- * Learning the benefits of using the ModelLocator pattern
- * Introducing business and value objects
- * Reviewing the purpose of the OrderCart business object

Architecting the Control Layer

- * Introducing the Control Layer in MVC
- * Introducing the Control layer
- * Understanding the Control layer as a concept
- * Understanding the Control layer as a structural organization
- * Introducing the ServiceLocator Pattern
- * Understanding the purpose of the ServiceLocator pattern
- * Reviewing what constitutes a Services repository
- * Creating a Services repository using the ServiceLocator
- * Using the Services repository
- * Instantiating and using the Services repository
- * Understanding the impacts of using a Services repository
- * Using AsyncToken and IResponders with RDS

Using Delegates in Cairngorm

- * Introducing the Delegate within the Control Layer
- * Understanding the role of the Delegate in the Control layer
- * Understanding the concept of the Delegate in the Control layer
- * Understanding the Delegate as a structural organization
- * Introducing the Delegate Pattern
- * Understanding the purpose of the Business Delegate pattern
- * Reviewing what constitutes a Delegate
- * Creating a Delegate within the Control layer
- * Using a Delegate Implementation
- * Instantiating and using a Delegate
- * Understanding the impacts of using a Delegate
- * Transforming data inside the Delegate
- * Transforming XML data to VOs
- * Understanding how the Delegate can transform incoming data

Using Commands in Cairngorm

- * Introducing the Command within the Control Layer
- * Understanding the role of the Command in the Control layer
- * Understanding the concept of the Command in the Control layer
- * Understanding the Command as a structural organization
- * Introducing the Command Pattern
- * Understanding the purpose of the Command pattern
- * Reviewing what constitutes a Command
- * Creating a Command within the Control layer
- * Using a Command Implementation
- * Understanding the impacts of using a Command
- * Instantiating and using a Command
- * Exploring Other Feature Implementations as Commands
- * Exploring ShoppingCart Features Implemented as Commands
- * Review how Commands Processing affects the Model and View layers

Using Business Events in Cairngorm

- * Introducing Business Events within the Control Layer
- * Understanding the role of the Business Event in the Control layer
- * Understanding the concept of Business Events in the Control layer
- * Understanding the Business Event as a structural organization
- * Introducing the Business Event
- * Introducing the concept of Business Events
- * Understanding the purpose of the Business Event
- * Reviewing what constitutes a Business Event
- * Creating an Event within the Control layer
- * Using Business Events with Business Objects and Commands
- * Understanding the impacts of using a Business Event

Using the FrontController in Cairngorm

- * Introducing the FrontController Concept
- * Understanding the role of the FrontController in the Control layer
- * Conceptualizing the FrontController in the Control layer
- * Understanding the FrontController as a Structural Organization
- * Understanding the FrontController Pattern
- * Introducing the concept of the FrontController pattern
- * Understanding the purpose of the FrontController pattern
- * Reviewing what constitutes a FrontController implementation
- * Creating an FrontController within the Control layer0
- * Using the FrontController in the View Layer3
- * Understanding how to instantiate the <FrontController>
- * Understanding how to use a <FrontController> instance
- * Understanding <FrontController> impacts to View layer components

Enhancing Application Architecture

- * Consolidating Command Components
- * Reviewing traditional implementations of Commands
- * Understanding how to consolidate Commands
- * Removing the CED from the View Layer
- * Removing the CairngormEventDispatcher (CED) for the View layer
- * Using the Compiled Cairngorm Library
- * Using the Cairngorm.swc library
- * Understanding Architecture Methodologies
- * Reviewing Cairngorm Usage Methodologies
- * Adding Cairngorm MVC to existing Flex applications
- * Using Cairngorm MVC with new Flex applications