



Flex 4 - Developing Rich Client Applications

Flex 4 - Developing Rich Client Applications is a three-day course that provides experienced application developers with practical experience using Adobe Flash Builder 4. This three day course introduces developers to all the primary features of the Flex 4 framework they will need to know in order to build a fully functional, well architected front end for a Rich Internet Application (RIA).

Target Student: Application developers who want to bring the power of Rich Internet Applications to their web applications.

Prerequisites: To gain the most from this class, you should already be familiar with basic programming concepts, processes and constructs. You should also be familiar with XML, HTML, and CSS.

Delivery Method: Instructor-led, classroom-delivery learning model with structured hands-on activities.

Benefits: This course provides experienced application developers with hands-on, practical experience using the Flex 4 framework and Adobe Flash Builder 4.

What's Next:

Flex 4 - Data and Communications provide Flex developers with the ability to connect their Flex front ends to remote, dynamic data using web services, Flash Remoting (AMF), and LiveCycle Data Services.

Flash Rich Content Creation Add animations and user interaction to your web applications with graphics, text and sound effects.

Fast Track to ColdFusion build and maintain dynamic and interactive web applications, as well as work with databases, custom tags and functions.

Performance-Based Objectives

Upon successful completion of this course, you will be able to:

- Use Flash Builder 4 and the Flex 4 framework to quickly develop Rich Internet Applications.
- Create highly interactive forms with data validation.
- Customize the look and feel of an application using CSS and custom MXML skins.
- Customize the interactivity of your application using MXML and ActionScript 3.0.
- Build robust, highly scalable Rich Internet Applications using a model-view-controller framework.
- Understand and use containers.
- Understand, control and create view states as well as customized component states.
- Retrieve XML Data with HTTPService class.





Flex 4 - Developing Rich Client Applications

Introducing Adobe Flex 4

- Introducing the Adobe Flash Platform
- Understanding Flex development technologies
- Understanding Flex application deployment
- Exploring the Flash Builder interface

Understanding Flex 4 fundamentals

- Understanding Adobe Flex namespaces
- Understanding Flex components
- Laying out and styling with Flash Builder
- Compiling and running an application
- Creating custom components
- Introducing skinning
- Accessing and using structured data within a custom component
- Introducing data binding
- Updating visual controls using dynamic data

Understanding components and layouts

- Introducing visual components
- Introducing Spark layout classes
- Introducing the Spark container classes
- Using constraints to control component layout
- Adding scrollbars to containers

Handling Events

- Understanding events
- Creating ActionScript event handler functions
- Understanding the event object
- Understanding event bubbling
- Adding event listeners with ActionScript

Validating and formatting data

- Using the Form container
- Using formatters
- Validating form data
- Triggering validation with events
- Triggering validation with ActionScript

Controlling navigation

- Understanding MX navigator containers
- Using the ViewStack container
- Creating custom navigation for the ViewStack container
- Using the TabNavigator container
- Using the Accordion container

Controlling application state

- Understanding view states
- Controlling view states

Animating components and states

- Applying effects to components
- Creating composite effects
- Applying transitions to application state changes
- Adding and removing components during animations

Controlling visual display with styling

- Creating global application styles
- Defining styles and skins for components
- Introducing Advanced CSS selectors

Skinning spark components

- Introducing skinning
- Incorporating visual elements drawn in other programs
- Changing the default display of skin parts

Implementing advanced skinning techniques

- Implementing different visual states for a skin
- Accessing custom component properties from a skin
- Adding scrollbars to skins

Accessing remote data

- Using HTTPService to load remote data
- Handling returned data and faults
- Making HTTP requests with parameters
- Using the wizards

Creating a typed data model

- Understanding the need for a typed data model
- Creating an ActionScript class for typed data
- Populating an ArrayCollection with value objects
- Understanding data bindings with value objects
- Refactoring value objects

Extending events

- Understanding the problem with bindings
- Defining the event type
- Handling the event in the main application
- Extending the Event class
- Dispatching a value object with the extended event
- Overriding the clone method

Rendering Content with the DataGroup container

- Passing UI components in the data provider
- Creating a custom item renderer
- Using the SkinnableDataContainer

Displaying data using the DataGrid

- Using the DataGrid control
- Formatting DataGrid control columns
- Using item renderers and item editors
- Using events and selected items with a DataGrid component

Deploying Flex and AIR applications

- Compiling the Flex application
- Creating a Flex application production build
- Creating a desktop application