



### Flex 3 - Developing Rich Client Applications

**Flex 3 - Developing Rich Client Applications** is a three-day course that provides experienced application developers with practical experience using Flex. This three day course introduces developers to all the primary features of Flex 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 ensure your success, you should be familiar with an object oriented programming language such as Java or C++ and be familiar with XML terminology.

**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 Flex.

#### What's Next:

**Flex 3 - Data and Communications** provides Flex developers with the ability to connect their Flex front ends to remote, dynamic data using Flex Data Services.

**Flash Rich Content Creation** Add animation and user interaction to your website with graphics, text and sound effects.

**Fast Track to ColdFusion** focuses on building and maintaining dynamic and interactive web applications, as well as working with databases, basic custom tags, and functions.

#### Performance-Based Objectives

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

- Use Flex Builder 3 to quickly develop Rich Internet Applications.
- Create highly interactive forms with data validation.
- Read information from and write information to a database.
- 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 customize component states.
- Retrieve XML Data with HTTPService.





## Flex 3 - Developing Rich Client Applications

### Introducing Flex 3

- Understanding Rich Internet Applications
- Introducing the Adobe Flex 3 Product Line
- The Foundation of the RIA: Flash Player/Flash Virtual Machine
- Understanding the Flex Application Process Flow

### Getting Started with Flex Builder 3

- Understanding the Relationship between Eclipse and Flex Builder 3 Interface
- Creating a Project and Your First Application
- Using Debugging
- Learning Flex Fundamentals

### Creating a Simple Flex Application

- Laying Out a Flex Application with Containers
- Adding User Interface Controls
- Creating Bindings between Components
- Architecting an Application with MXML Components

### Handling Events

- Creating Event Handlers Using Inline ActionScript
- Handling Events with ActionScript Functions in External Files
- Understanding the Event Object

### Using Simple Controls

- Getting Familiar with Flex Controls
- Using Component Controls
- Displaying Images
- Laying Out an Application with Containers

### Understanding Containers

- Using the Application Container
- Using Layout Containers
- Container Best Practices
- Component Layout and Sizing Rules

### Laying Out an Application Using Constraint-Based Layout

- Understanding Absolute Positioning
- Positioning Components within the Canvas Container
- Creating a Constraint-based Layout
- Using Constraint-based Layouts with Nested Components

### Using View States for Application Design

- Understanding View States
- Controlling View States
- Creating View States that include Custom Components States

### Creating Application Navigation

- Understanding Navigator Containers
- Exploring Different Navigator Containers

### Customizing the Application

- Using the Styles API to Change Look-and-Feel
- Using Theme Styles
- Applying Behaviors to Components
- Applying Transitions to View States

### Using MXML and ActionScript Data Models

- Using the MVC Design Pattern
- Creating an MXML Data Model
- Using ActionScript Classes as a Data Model
- Instantiating an Object in MXML from an ActionScript Class
- Defining Class Methods

### Exchanging Data Between Components

#### Using Custom Events

- Using a Binding to get Data from a Component
- Creating Custom Events
- Creating, Dispatching and Handling a Custom Event

### Retrieving XML Data with HTTPService

- Retrieving XML Data at Runtime
- Retrieving Data at Runtime with HTTPService
- Handling Faults
- Making HTTP Requests to Different Domains

### Looping Through Data Using a Repeater

- Understanding the Repeater Component
- Using DataProvider Data in Repeated Controls
- Dynamically Creating Components using a Repeater
- Using Repeater Data in ActionScript
- Referencing Repeated Components

### Displaying Data Using the DataGrid

- Using the DataGrid Control
- Displaying Simple XML Data in a DataGrid
- Formatting DataGrid Columns
- Using Item Renderers and Item Editors
- Using the TileList and HorizontalList
- Using Events and Selected Items with List-based Components