

Flex 2: Data and Communications

Description:

Flex 2: Data and Communications provides experienced application developers with hands-on, practical experience connecting their Flex front ends to remote, dynamic data using Flex Data Services. This two day course instructs developers how to connect with remote data using web services and Flex Data Services' features allowing communication with a Java backend. In addition, skills will be learned how to manipulate and format the returned data.

Audience:

This course is designed for application developers who want to connect their Flex front ends to dynamic data. To gain the most from this class, you should:

- Have attended the F2RCA course.
- Have equivalent knowledge of the topics covered in F2RCA.

Course Outline:

Unit 1: Introducing Adobe Flex 2

- Understanding rich Internet applications
- Introducing the Adobe Flex 2 product line
- The foundation of the RIA: Flash Player/Flash Virtual Machine
- Understanding the Flex application process flow
- Getting help and other resources

Unit 2: Accessing Web Services

- Using web services
- Invoking web service methods and using the results
- Consuming a web service
- Handling results using an event handler
- Handling faults
- Calling multiple methods from the same WebService object
- Passing Parameters to Web Services

Unit 3: Introduction to Flex Data Services

- Introducing Flex Data Services
- Installing Flex Data Services
- Explore the Flex Data Services Installation
- Creating a Flex application for use with Flex Data Services
- Navigating the Flex Project Structure
- Understanding the Server Compilation Process
- Flex Data Services Features
- The Flex Proxy Service
- The Proxy Service Default Destination
- Named Proxy Service Destinations

Unit 4: Using ColdFusion Components as Remote Object Services

- Understanding remote object services
- Configuring ColdFusion, Flex Builder and calling a remote object service method
- Exchanging data between ActionScript and ColdFusion

Unit 5: Using Java Classes as Remote Object Services

- Understanding Remote Object Services
- Calling a Remote Object Service method
- Handling RPC Events
- Complex Remote Method Calls
- Exchanging Data between ActionScript and Java

Unit 6: Validating and Formatting Data

- Validating form data
- Triggering validation with events
- Validating Numeric Input
- Triggering validation with ActionScript
- Using regular expressions
- Formatting Data

Unit 7: Manipulating Complex Data

- Understanding Collection Classes
- Filtering data
- Filtering data
- Creating a data sort
- Using the IViewCursor interface
- Creating a project that uses FDS

Unit 8: Using the Flex Message Service

- Introducing the Flex Message Service
- Reviewing Message Destination Configuration
- Understanding Publish-Subscribe Messaging
- Publishing Messages
- Receiving and processing messages
- Sending and Receiving Complex Data

Unit 9: Using the Flex Data Management Service

- What is the Flex Data Management Service?
- Exploring a Data Management Services Destination
- Data Management Service Architecture
- Changing Data
- Managing Pending Changes
- Using Events
- Handling DataService Results
- Advanced Data Management Service Features

Unit 10: Providing XML to Controls with E4X

- Understanding XML structure
- Working with XML data in ActionScript 3
- Using the Tree Control
- Retrieving XML data and populating a Tree
- Using XML objects
- Removing XML items from a list

Unit 11: Uploading Files to a Server

- Implementing file transfer basics
- Uploading a file to the server
- Enhancing the user experience with FileReference events
- Understanding the FileReferenceList class
- Use the Data Management Service to retrieve photo data
- Send real-time messages between applications