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Adobe ColdFusion level 1 course content (3-day)

Course Description:

ColdFusion 9 Fundamentals is a 3-day course that provides experienced Web developers with the knowledge and hands-on practice they need to start building and maintaining dynamic and interactive Web applications using ColdFusion 9.

Learning Objectives:

Upon completion of this course, you should be able to:

- Set up and manage the ColdFusion 9 development environment with ColdFusion Builder 2
- Use ColdFusion Markup Language (CFML)
- Connect to a database
- Build queries that retrieve, insert, and update data dynamically
- Perform client-side and server-side validation
- Authenticate users and secure access to pages
- Use local, query, form, and URL variables
- Re-use code
- Incorporate custom tags, user defined functions, and ColdFusion components into your application
- Create a search form
- Build a data drill-down interface
- Develop fully interactive, database-driven web applications

Target Audience:

ColdFusion 9 Fundamentals is a 3-day course that provides experienced Web developers with the knowledge and hands-on practice they need to start building and maintaining dynamic and interactive Web applications using ColdFusion 9.

Course Outline:

Lesson 1: Course Overview

- About the course
- Course objectives
- Course prerequisites
- Course format

Lesson 2: Introducing ColdFusion

- Advantages of dynamic web pages
- Using ColdFusion Markup Language (CFML)
- ColdFusion Components and Features
- Configuring ColdFusion environments
- Creating a site with Dreamweaver CS4
- Creating local variables with cfset
- Referencing variables
- Displaying variable values using cfoutput
- Including files using the cfinclude tag
- Creating comments

Lesson 3: Publishing Database Content

- Understanding Relational Databases
- Using Database Drivers to connect to data sources
- Understanding the cfquery tag
- ColdFusion Administrator debugging
- Using <cfoutput> to display database data
- Using the Dynamic Table Tool
- Additional information returned with queries
- Using ColdFusion Functions

Lesson 4: Building Forms with ColdFusion

- Understanding HTML forms and form controls
- Enabling debug output
- Self-Posting forms
- Determining form submission with cfif and IsDefined()
- Evaluating form variables
- The cfparam tag
- Converting to ColdFusion forms
- Using cfselect

Lesson 5: Building Search Interfaces

- Using form data in dynamic queries
- Preserving form data
- Creating dynamic SQL
- Using multiple search criteria
- Creating a dynamic SQL statement
- Using text searches
- Using list searches

Lesson 6: Building a Drill-Down Interface

- Using Dynamic URL parameters
- Creating a Query String
- Dynamic URL Parameters
- Creating a data drill-down
- Data drill-down page

Lesson 7: Inserting New Data

- Building an Insert FORM Page
- Using ColdFusion Validation
- Using Client-side Validation
- Using Server-side Validation
- Creating Custom Validation
- Building Insert ACTION Logic
- Using cfquery with INSERT
- Redirecting Process Flow with the cflocation tag

Lesson 8: Updating Data

- Building an Update FORM Page
- Providing the primary key for update
- Pre-Filling HTML Forms
- Building Update Logic with cfquery

Lesson 9: Reusing Templates

- Reusing Code
- Using Custom Tags
- Using User-Defined Functions
- Finding UDFs
- ColdFusion Components
- Finding CFCs

Lesson 10: Securing an Application

- Using the ColdFusion Login Wizard
- Understanding the Login Pages
- Customizing the Login
- Using the Application Framework
- Using Application Events
- Using Application Variables
- Using Session Variables

Adobe ColdFusion level 2 course content (3-day)

Course Description:

Advanced ColdFusion 9 provides ColdFusion application developers with the knowledge and hands-on practice that they need to build, maintain, and scale effective web applications. Topics include using the Application Framework, creating advanced queries, manipulating complex data in arrays and structures, structuring your code with ColdFusion Components, gracefully handling errors and exceptions, encapsulating your user-interface with custom tags, leveraging external Java code libraries, and creating highly interactive interfaces using Flash Forms.

It includes optional content on exposing and reusing application functionality as web services and working with XML documents. This course focuses on creating and delivering scalable and well-performing applications.

Learning Objectives:

After completing the course the user will be able to build, maintain, and scale effective web applications using ColdFusion 9 Development Advanced.

Target Audience:

This course is for developers with prior ColdFusion experience. To take this course, you should have:

- Completed the Fast Track to ColdFusion 9 course, or other equivalent experience building ColdFusion applications.
- Experience developing web applications using ColdFusion for at least three months upon completion of the Fast Track to ColdFusion 9 course.
- Practical experience using CFML tags, functions, and variables.
- Practical experience with the SQL command set, including SELECT, INSERT, and UPDATE

Course Outline

Unit 1: Introducing the Course

- Getting to know the course methodology and format
- Understanding the course objectives
- Understanding the course prerequisites

Unit 2: Configuring your Application

- Using the Application Framework
- Introducing CFC syntax
- Configuring application settings
- Handling application events
- Handling request events
- Locking shared scope variables
- Handling session events

Unit 3: Manipulating Lists and Queries

- Using lists
- Manipulating queries
- Summarizing and grouping data
- Transaction processing
- Querying a query

Unit 4: Manipulating Data with Arrays and Structures

- Using arrays
- Using structures
- Using built-in ColdFusion data structures
- Dynamically evaluating variables
- Combining data structures
- Accessing data by value or by reference

Unit 5: Building ColdFusion Components

- Reviewing ColdFusion Components
- Creating a static component
- Defining functions in components
- Invoking static CFC methods
- Using CFC self-generating documentation
- Creating instance based components
- Persisting CFC instances
- Using built-in components
- Inheriting methods, properties, and data between components
- Restricting access to component methods

Unit 6: Handling Errors and Exceptions

- Introducing error handling
- Customizing application error messages
- Understanding the try/catch methodology
- Learning about exception handling frameworks

Unit 7: Leveraging Code Reuse

- Writing code using `<cfscript>`
- Creating custom tags
- Nesting custom tags
- Using JSP tag libraries
- Calling a Java library

Unit 8: Creating Flash Forms

- Understanding Flash Forms
- Laying out Flash Forms
- Using data binding
- Working with a dynamic number of elements
- Setting default values for form fields
- Extending Flash Form interactivity with ActionScript
- Using `<cfgrid>`
- Controlling form appearance
- Extending Flash Forms with custom components

Unit 9: Scaling Applications

- Understanding performance, robustness, and scalability
- Effectively configuring the ColdFusion server
- Identifying scalability bottlenecks in your code
- Caching recordsets
- Using `<cf_Accelerate>` to cache generated page contents
- Caching entire page results
- Using asynchronous processes to improve performance
- Supporting concurrency

Unit 10: Interfacing with External Systems

- Retrieving data from web pages
- Retrieving external text
- Importing text into a query object
- Creating web services
- Calling external web services

Unit 11: Using XML

- Introducing XML
- Creating XML documents
- Application of XML: Really Simple Syndication (RSS)
- Retrieving XML data from XML documents
- Validating an XML document
- Referencing data from an XML Document object
- Transforming XML to HTML