



Description

Software Architecture for ColdFusion Developers is a 3-day hands-on course that introduces ColdFusion Developers to the art of software architecture with ColdFusion. Topics include UML and design patterns, object oriented programming techniques, creation and use of APIs, best practice uses of Custom Tags, ColdFusion Components, Event Gateways, and more. Student labs in this course not only teach the concepts but also encourage original thought and problem solving skills.

Objectives

Students will complete the Software Architecture for ColdFusion Developers course with the ability to:

- Plan and design an application
- Use Custom Tags and ColdFusion Components to create applications that have a separation of business and presentation logic
- Read and represent the design for an application using UML and other communication techniques
- Develop applications that implement design patterns
- Build applications that take advantage of object oriented programming features such as inheritance and encapsulation
- Develop applications that are easy to maintain and extend
- Migrate existing applications to a more object oriented framework
- Identify architectural bottlenecks and areas that are candidates for re-engineering

Prerequisites

Minimum prerequisite is a familiarity with CFML Syntax. It is recommended that students have an advanced knowledge of ColdFusion and have completed the Advanced ColdFusion for Developers course.

Unit 1: About the Course

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

Unit 2: Software Architecture Overview

- Defining the goals of architecture
- Pros and cons of modularization and standards
- Terminology
- Understanding the ColdFusion platform
- Overview of CFML constructs

Unit 3: CFML Syntax and Complex Data Structures

- CFSCRIPT Syntax
- Simple Data Types
- Usefulness of complex data
- Arrays
- Structures
- XML
- About Lists
- Nested complex data

Unit 4: Custom Tags

- Uses for Custom Tags
- Creating and calling custom tags
- Custom Tags and variable scopes
- Nested tags
- Pros and Cons
- Best practices with custom tags

Unit 5: ColdFusion Components

- Uses for ColdFusion Components
- Creating and calling CFCs
- CFCs and variable scopes
- Restricting access to CFC data and functionality
- CFC best practices
- Event Gateways and ColdFusion Components

Unit 6: APIs

- Understanding APIs
- Benefits of APIs
- The role of Custom Tags and CFCs

Unit 7: Introducing Object Oriented Programming

- Thinking OOP – understanding object oriented thought
- OOP features
- Benefits of OOP
- Measuring Success

Unit 8: UML and Design Patterns

- Understanding UML and UML Tools
- Pros and Cons of UML and it's alternatives
- Common Design Patterns Explained
- Implementing Design Patterns
- Anti-Patterns

Unit 9: Testing and Optimising Applications

- Understanding the purpose of testing
- Testing methodologies
- Identifying bottlenecks

Unit 10: Continuing After Class

- Practice Challenges
- Available Resources