

Table of Contents

Table of Contents	i
Part 1: Introduction to ColdFusion.....	1
Static pages vs. Dynamic pages.....	2
Server-side Web Technologies	3
Database Alphabet Soup: ODBC/JDBC, DSNs and SQL	3
Course Objectives and Prerequisites.....	4
Introduction to Course Project.....	5
Part 2: ColdFusion Basics	7
Using CFML.....	7
Code Editors	7
Dreamweaver Interface.....	8
Tag Updaters / Extensions	8
Tag Editing Dialog Boxes.....	8
Embedded Tag Help	9
Using ColdFusion Comments.....	10
Creating Variables	10
<cfset> and <cfoutput>.....	10
Variable Scope/Prefixes.....	11
Built-in ColdFusion Functions.....	13
CF Function Reference (Dreamweaver specific).....	14
Online Reference (http://livedocs.adobe.com).....	15
Tip: (http://cfquickdocs.com)	15
Demo: Built-in Functions	15
Demo: Date / Time Functions	17
Using <cfinclude> to reuse code.....	20
Demo: Create Header and Footer with <cfinclude>	20
Exercise 1: Build Dynamic Page Footer using Variables and Date Functions	23
Challenge	24
Possible Solution to Exercise 1.....	25
Part 3: Dynamic Data: Querying the Database	27
Database Basics	27
Introduction to SQL	30
Select Statement.....	30
Update Statement.....	30
Insert Statement	31
Delete Statement	31
Data Source Name (DSN) / Remote Development Server (RDS).....	31
The DSN Used in This Class: movieList	32
Course Project Database	33
Querying the database with <cfquery>.....	37
<cfdump> for Quick Output	38

Exercise 2: Query the database.....	39
Challenge	40
Possible Solution to Exercise 2	41
Customizing Display with <cfoutput>.....	43
Demo: Using <cfoutput>	43
Building Dynamic Tables	45
Shortcut: <cftable>	46
Shortcut: Dynamic Table Tool (in Dreamweaver).....	48
Exercise 3: Display Resulting Records manually with <cfoutput>.....	49
Challenge	49
Possible Solution to Exercise 3.....	51
Part 4: Creating a Drill-down Interface	53
Passing Variables between Pages.....	53
“Two-page method”	54
Demo: Pass Variables via Links	54
Demo: List of Actors with links.....	56
Receive Variables through the URL.....	57
Using a WHERE clause in a SQL Statement.....	57
Protecting Against SQL Injection Attacks with <cfqueryparam>	58
Exercise 4: Drill-down for More Detail.....	61
Challenge	62
Possible Solution to Exercise 4.....	63
Part 5: Conditional Statements and Forms.....	67
Conditional Statements	67
<cfif>, <cfelseif> and <cfelse>.....	68
Comparison Operators.....	69
Operator	69
Description.....	69
Demo: Conditional Statements	70
Demo: Conditional Statements Using URL Variables.....	70
Using the isDefined() function.....	73
Exercise 5: Conditional Statements – Data Validation.....	75
Challenge	76
Possible Solution to Exercise 5.....	77
HTML Form Review	79
Demo: Pass Variable through a Form.....	79
Exercise 6: Process Form Submission	83
Challenge	85
Possible Solution to Exercise 6.....	87
Self-Submitting Forms.....	91
Using the <cfparam> tag to set a default value.....	93
Quick Examination of a ColdFusion Framework (Methodology): Fusebox.....	93
Exercise 7: Self-submitting Form	95
Challenge	97
Possible Solution to Exercise 7.....	99
Dynamically Populating Select Lists	101
HTML Review: <select> tags.....	101

Demo: Dynamic Select List	101
Exercise 8: Create a Dynamic Select List	103
Challenge	104
Possible Solution to Exercise 8	105
Part 6: Quick Introduction to RSS and Ajax with <cfform>	109
Reading an RSS Feed.....	109
Demo: Consuming an RSS Feed.....	110
Demo: Creating an RSS Feed	112
Introducing the <cfform> Tag.....	112
Building a Mask with <cfform>	113
Automatically Build a Dynamic Select List with <cfselect>	114
Demo: Creating an Auto Suggest Text Field with <cfform>.....	115
Part 7: Search Interface	117
Creating a Search Interface	117
Demo: Using the LIKE clause	117
Using % and _ in a LIKE Statement	117
Demo: Building Dynamic SQL Statements	119
Exercise 9: Create a Search Interface	123
Note	125
Challenge	125
Possible Solution to Exercise 9.....	127
Part 8: Insert Records into the Database.....	129
SQL Insert Statement.....	129
Demo: Insert Record Part 1 – the Form	129
Insert Record Part 2 – the Insert.....	130
Shortcut: <cfinsert>.....	131
Redirect Users with <cflocation>.....	131
Exercise 10: Insert a New Actor in the Database	133
Challenge	134
Possible Solution to Exercise 10.....	137
Automated Form Validation.....	139
Client-side vs. Server-side validation: When does the validation code run?	141
Exercise 11: Automatic Client-side (or Server-side) Form Validation.....	143
Challenge	143
Possible Solution to Exercise 11.....	145
Part 9: Edit (Update) Database Records	147
SQL UPDATE Statement Review	147
Demo: Update Record Page 1 – select the record to edit.....	148
Passing the Primary Key	148
Page 2 – View Current Data in a Form.....	149
Page 3 – Perform the Update to the Database.....	151
Shortcut: <cfupdate>.....	152
Exercise 12: Edit a Record	153
Challenge	155
Possible Solution to Exercise 12.....	157
Note on Deleting records	159

Review of the SQL Delete Statement	159
“Deleting” without deleting	159
No <cfdelete>!	159
Part 10: Reusing Code	161
Reusing code with <cfinclude> and <cflocation>	161
Custom Tags	161
Demo: custom tags.....	162
Where to store Custom Tags.....	165
Demo: Custom Tag with Parameters	165
CALLER and ATTRIBUTE scopes	167
Using <cfmodule>	168
A Note about CFX tags.....	169
Exercise 13: Calling a Custom Tag to Display a List of Years.....	171
Challenge	172
Possible Solution to Exercise 13.....	173
User Defined Functions (UDFs) and ColdFusion Components (cfc).....	175
Creating UDFs with the <cffunction> tag.....	175
Using ColdFusion Components (CFCs)	176
Creating Components	176
Calling or Invoking Components.....	177
Passing Arguments to Components	178
The Component Code	179
The main CFML page.....	180
View a Component directly in the browser.....	181
Exercise 14: UDFs.....	183
Challenge	184
Possible Solution to Exercise 14.....	185
Part 11: Using Session Variables for Password Protection	187
Session Variables.....	187
Creating Password Protected Pages	188
The Included Page: demo-password-protect.cfm.....	188
The Log in Page: demo-password-form.cfm	189
Application.cfc.....	191
Note regarding Application.cfm	191
Locking Session and Application variables with <cflock>	191
Exercise 15: Password Protecting Pages (optional)	193
Challenge	195
Possible Solution to Exercise 15.....	197
Part 12: Tracking User Information with Cookies (optional).....	201
Demo: setting cookies	203
Exercise 16: Remember Users by using Cookies.....	207
Challenge	208
Possible Solution to Exercise 16.....	209
Part 13: Sending email with <cfmail> (optional).....	211
Using ColdFusion to Send Email	211

<cfmail> Tag Syntax	212
Demo: Sending an email	212
Exercise 17: Sending Automated Emails	213
Possible Solution to Exercise 17	215
Appendix A: Resources	217
Appendix B: Set-up Notes	219
Appendix C: Create a Dreamweaver “Site”	221
Location of our course files	221
Site Creation – Basic	221
The Advanced Tab – Additional Categories:	231
Site Files Panel	232
“Create a Site” vs. “FTP or RDS Server Connection”	234
Appendix D: Selecting Among ColdFusion Code Reuse Methods.....	237