

This document tracks the time I spent to learn the Online Course "Introduction to ColdFusion Web Development", course number P121.23 taken at <http://www.eclasses.org/> from reading the text book, reading online resources, software installations, programming and debugging.

These online classes are primarily conducted via the web board interface - called Web Crossing. You can take a Virtual Tour of an Online Classroom at <http://www.eclasses.org/Demo/> (note: the ".23" in P121.23 refers to the number of times the course has been given).

ColdFusion 8 is the next version of Adobe's application server and web development tool.

Total number of hours I spent (details below) = 127.75 hrs

*******Course Description*******

Introduction to ColdFusion Web Development - course number P121.23

Start Date: 31-March-2008; **Duration:** 6 weeks; **CEUs:** 3.0; **Course Number:** P121.23; **Instructor:** Zarina Vakhitova, PhD

How eClasses Work

The classroom environment is based on Lundeen & Associates Web Crossing technology, a threaded messaging system. Instructors post lectures, reading selections, and hands-on assignments once a week in the online classroom. Students can discuss the assignments with the instructor and amongst themselves in the classroom area. **This format has no set meeting time**, which allows students to attend class at a time most convenient to them, yet still provides logically organized communication between class participants. Students can apply for the completion certificate after finishing the class. Web Study certificate is also available. Click on the Certificates link on the top navigation bar for more information.

About eClasses.Org - Affordable Web Technology Learning

Since 1998 eClasses.Org has provided the very best in online training to 45,000 Web developers and other professionals. It offers a catalog of 40 online courses covering the breadth of Web work, from HTML to Flash; from CSS to XML. All classes are taught by fellow experts and working professionals in the field.

- Online, instructor-led web technology classes
- Affordable and flexible learning solution
- 4 Web certificate programs

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Course Outline: Introduction to ColdFusion Web Development

Do you want to build exciting, compelling, dynamic, interactive Web sites but don't know how to program? Do you think that the challenge of web programming is beyond your grasp? This course will show you how to quickly begin building dynamic, interactive, data-driven Web applications with powerful capabilities - even if you have no prior programming experience. With ColdFusion and the assistance of your expert instructor, you'll be building exciting, innovative and compelling Web

applications in no time at all! Students will gain the experience in ColdFusion programming via the completion of a series of practical ColdFusion projects.

Week 1: Getting Ready. Introducing ColdFusion Variables and Functions.

- Introducing ColdFusion
- Introducing CFML
- Setting Up Web Server
- Installing ColdFusion MX Server
- Installing ColdFusion Server or HomeSite Text Editor
- Setting up Variables using CFSET
- Variable Scope
- Introducing ColdFusion functions
- Displaying your variables using CFOUTPUT
- Commenting your code
- The CGI Scope

Week 2: Controlling the Flow of Your Template

- Passing Data Between ColdFusion templates
- ColdFusion Expressions: data types, operators
- Conditional Logic CFI, CFSWITCH
- Exiting and Aborting Templates
- Redirecting to Another Template CFLOCATION

Week 3: Connecting to a Database for the First Time

- Using ColdFusion Administrator to set up ODBC Data Source
- Introducing RDBMS model:
 - Understanding database relationships
 - Building a database model
 - Deploying the model: creating a database; creating tables
- Crash Course on Sequential Querying Language (SQL):
 - Querying a database - introducing CFQUERY
 - Retrieving data from the database using SELECT statement
 - SQL Operators

Week 4: Continue Working with Databases

- Inserting data into a database using INSERT statement
- ColdFusion Forms

- Validating Form Data
- Handling Errors CFTRY, CFCATCH
- Including an outside code using CFINCLUDE

Week 5: More SQL. File Management

- Updating database Records using UPDATE statement
- Building an update form and action page
- Deleting database records using DELETE
- Building a delete form and action page
- File management - working with CFFILE
- Uploading Files and manipulating Files on the server

Week 6: Sending and Receiving Email

- Using CFMAIL tag to send email from your template
- Using CFMAILPARAM Tag
- Using CFPOP Tag
- Handling Attachments

Prerequisites

This course is designed for students proficient in HTML (knowledge of forms is essential). No previous programming experience is required. Knowledge of SQL is helpful, but not required - introduction to SQL is included in the course. Basic knowledge of MS Access is required.

Requirements

- Hardware: The ColdFusion Application Server for Windows has the following minimum hardware requirements, according to Macromedia:
 - Pentium or higher running Windows 98, Me, NT, 2000, or XP
 - 400 MB of disk space
 - 256 MB of RAM
 - A CD-ROM drive

The hardware requirements for Linux are similar to ColdFusion for Windows. Supported versions of Linux are RedHat 6.2 through 7.2 and SuSE Linux 7.2 and 7.3.

- Software:
 - The TCP/IP networking protocol must be enabled on your system.
 - Web Browser: Internet Explorer 4+ or Netscape Navigator 4+.
 - ColdFusion MX Application Server or any other version of ColdFusion Application Server starting from version 4.0. 30 days trial version of ColdFusion MX can be downloaded from <http://www.macromedia.com/software/coldfusion/downloads/>
 - Web server: ColdFusion MX does not require an external web server. For other versions of ColdFusion you can use one of the following: Personal Web Server with Windows 98, ME, NT; Internet Information Server comes with Windows 2000 Professional Edition and XP Professional Edition. You cannot use ColdFusion Server not MX version with Windows XP Home Edition.

- Text Editor: HomeSite, 30 days trial version can be downloaded from: <http://www.macromedia.com/software/homesite/> or Notepad - plain text editor for Windows, or any similar program for Unix or Linux
- Database: Required is MS Access 97/2000 / XP

Required Book: Mastering ColdFusion MX by Arman Danesh, Raymond Camden, S. Bainum, C. Mohnike, Paperback, 1022 pages, ISBN: 0782141242, Publisher: Sybex, Pub. Date: September 13, 2002

Instructor: Zarina Vakhitova

Zarina Vakhitova has great organizational and technical skills that come from completing a PhD and has worked successfully in the computer industry. She has taken her extensive knowledge in the IT field and started her own company Petrocom Computer School passing on her knowledge to the next generation of IT professionals. Zarina keeps her skills up-to-date by regularly taking on web programming contracts.

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ColdFusion application Server is one part of the ColdFusion environment. --- An **application server** is a [software engine](#) that delivers [applications](#) to [client computers](#) or devices, typically through the Internet and using the [HyperText Transfer Protocol](#). *Application servers* are distinguished from [web servers](#) by the extensive use of [server-side dynamic content](#) and frequent integration with [database engines](#).

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ColdFusion is an [application server](#) and software development framework used for the development of computer software in general, and dynamic [web sites](#) in particular. In this regard, ColdFusion is a similar product to Microsoft [ASP.NET](#), [JavaServer Pages](#) or [PHP](#).

The primary distinguishing feature of ColdFusion is its associated scripting language, [ColdFusion Markup Language](#) (CFML), which compares to [JSP](#), [ASP.NET](#), or [PHP](#) and resembles [HTML](#) in syntax. "ColdFusion" is often used synonymously with "CFML", but it should be noted that there are [additional CFML application servers](#) besides ColdFusion, and that ColdFusion supports programming languages other than CFML, such as server-side [Actionscript](#) and embedded scripts that can be written in a [JavaScript](#)-like language, known as [CFScript](#).

Originally a product of [Allaire](#), and released in July 1995, ColdFusion was originally developed by brothers JJ and Jeremy Allaire. In 2001 [Allaire](#) was acquired by [Macromedia](#), which was in turn acquired by [Adobe Systems](#) in 2005.

ColdFusion is most often used for data-driven [web sites](#) or [intranets](#), but can also be used to generate remote services such as [SOAP web services](#) or [Flash](#) remoting.

ColdFusion can also handle asynchronous events such as [SMS](#) and [instant messaging](#) via its gateway interface, available in ColdFusion MX 7 Enterprise Edition.

ColdFusion provides a number of value-added services out of the box. Among them:

- conversion from [HTML](#) to [PDF](#) and [FlashPaper](#)
- client-side code generation, especially for form [widgets](#) and validation
- platform-independent database querying via [ODBC](#) or [JDBC](#)
- data retrieval from common enterprise systems such as [Active Directory](#), [LDAP](#), [POP](#), [HTTP](#), [FTP](#), [Microsoft Exchange Server](#)
- client and server cache management
- session, client, and application management
- file [indexing](#) and searching service based on Verity K2
- [XML](#) parsing, querying, and validation
- Server clustering
- GUI administration

- Task scheduling

Other implementations of CFML offer similar or enhanced functionality, such as running in a [.NET](#) environment or image manipulation

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A Web template is different from a static Web page because it can publish data dynamically.

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The ColdFusion Markup Language (CFML) is the language that you use to create ColdFusion applications. CFML is a tag-based language, just like HTML. You use it in conjunction with HTML and other client-side languages, such as JavaScript or VBScript, to create the templates that make up a ColdFusion application. CFML is used to determine *what* to display, while HTML specifies *how* to display it.

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Add database-driven interactivity to your Web site.

Do you need to add interactive elements to your Web site, but aren't flushed with the resources to hire a Java developer? ColdFusion helps you build database-driven applications such as content publishing systems, online stores, and business reporting applications, without first having to acquire a degree in computer science. At the same time, advanced features such as user-defined functions, interactive debugging, enterprise application integration, and structured exception handling make ColdFusion ideal for advanced developers creating complex Web applications.

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How eClasses Work

About the Classroom

The classroom environment is based on Web Crossing technology, a threaded messaging system (message board). Instructors post lectures, reading assignment, and hands-on assignment once a week. Classes start on a certain date but this format has no set meeting time, which allows students to attend class at a time most convenient to them. Students only need to complete the assignment within one week and continue with another assignment in the following week.

The main benefit of our classes is the interaction among you, your instructor and other students in classroom (online message board). Students can post comments or questions to the instructor or other students, share ideas, communicate about your learning experience, or discuss topics of the course with other interested students.

How to Access Your Classroom

After you register for a class, you will get a receipt email and an instructional email. Simply follow the instructions to add yourself to the classroom (or grant yourself access to the classroom). After that, you can access your classroom at <http://interact.eclasses.org/cgi-bin/WebX?15@@>

How to Use the Classroom

The classroom is organized by folders and discussion. A folder is like a folder or directory on your hard disk. It contains discussions or other sub-folders. Every folder has a title and a heading which describe the folder. On top of each page, there is the path of the current folder, so you can see where you are. If you click on any folder or you will go to that page. Take a look at our [DEMO](#) to see how the classrooms look like.

A discussion has a title and heading that describe its purpose. Discussions are not 'chat-rooms', they are more like organized electronic mail. You can browse a discussion and post a message at any time. To post a message, just scroll down to the message form at the end of each discussion. Fill in the form, and then click on the 'Post Message' button following the form.

Someone else will see your post later, when they are browsing or when they check for new messages. You can always read the whole discussion from beginning to end, so you never have to wonder what people are talking about. Because a discussion may have many of messages posted to it, long discussions are split into smaller pieces. In a long discussion, you'll see buttons at the top and/or bottom that let you go back and forth.

The system automatically keeps track of messages as you view them. When you see a discussion in a folder, the listing includes how many messages are in the discussion, and how many are new messages. There is another way to check for new messages, through your 'Subscription List'. After you subscribe to a discussion or folder, you can later check your subscription list at any time. You'll then be shown the first new message, discussion, or folder that has been added since you last checked.

What are CEUs?

One Continuing Education Unit (CEU) is generally defined as ten contact hours of participation in an organized continuing education experience under responsible sponsorship and qualified instruction. For instructor-led online learning, each course is assigned a number of CEUs for that course which may not relate to the total number of hours an individual takes to complete the course. The number of CEUs awarded is the average number of hours required to complete a course.

Class Schedule

Almost every week, a group of classes is open for registration. A class is open about 1-2 months prior to its start date. Click on the Open Classes link to see the list of classes that are open for registration now. The same class is offered every 2-3 months.

If you are interested in a class but it's not on the Open Classes list, you can click on Class Catalog link and go to the description page for the class. Then click on Register Now button and put in your email address. We will send you an email when the class is open.

Registration Deadline

Effective Jan 1, 2005: The last day to register for a class is the start date of that class.

Student Center

[Student Center](#) is another online system which requires a different password (which students selected when they first register.) Below is the list of what you can do in the Student Center:

- Grant yourself access to your registered courses
- Register for new eClasses
- Get the list of your previous and current courses
- Get your payment history
- Check your final grades
- Apply for class completion certificates
- Apply for Web Study certificates
- Check your Web Study certificate application status
- Retake courses at special prices
- Update your email and mailing address

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Documentations: The documents - **file names** - that I wrote/created are:

1. TimeSpentToLearnIntroductionToColdFusion.doc
2. Most Documents are in *.html, *.htm or *.mht format.

Date	Time Spent (hrs)	Description (mainly)
Wednesday March 12, 2008	0.5	Start of Introduction to ColdFusion Web Development - course number P121.23 Course officially starts on March 31, 2008. Reading and documenting course materials at eClasses.org at http://www.eclasses.org/ Documents created are located at: C:\Users\boutros\Documents\MyPrograms\eClasses.Org\Course_IntroductionToColdFusion_P121.23\
Friday March 14, 2008	2.5	Review Week1 Online Lectures of Introduction to ColdFusion class - ColdFusion Environment, Variables, and Functions - at http://www.eclasses.org/ Installed 'ColdFusion 8 - Developer Edition (Free)' & 'ColdFusion 8 Report Builder' from: http://www.adobe.com/support/coldfusion/downloads.html#proddownloads
Tuesday April 1, 2008	0.5	Reading Week1 Online Lectures of Introduction to ColdFusion class - ColdFusion Environment, Variables, and Functions - at http://www.eclasses.org/
Wednesday April 2, 2008	4.25	Continue-Reading Week1 Online Lectures of Introduction to ColdFusion class - ColdFusion Environment, Variables, and Functions - at http://www.eclasses.org/
Thursday April 3, 2008	5.25	Read Week1 Online Lectures of Introduction to ColdFusion class - ColdFusion Environment, Variables, and Functions - at http://www.eclasses.org/ Read Introduction to ColdFusion class -Week1- Online reference at: http://en.wikipedia.org/wiki/ColdFusion http://en.wikipedia.org/wiki/Application_server http://en.wikipedia.org/wiki/Common_Gateway_Interface Book: Mastering ColdFusion MX by Arman Danesh, et. al. Introduction, Appendix A: [pages 805 - 808].
Friday April 4, 2008	5.25	Book: Mastering ColdFusion MX by Arman Danesh, et. al. Chapter 1: [pages 1 - 8]; Chapters 4, 5: [pages 30 - 49].
Saturday April 5, 2008	4.0	Working on First week Homeworks for Intro. To ColdFusion class. Posted it online at: http://mysite.verizon.net/boutros/IntroColdFusion/Wk1HWs.zip Note: Verizon ISP does NOT support ColdFusion Web Hosting.
Sunday April 6, 2008	5.75	Finished First week Homeworks for Intro. To ColdFusion class. Posted it online at: http://mysite.verizon.net/boutros/IntroColdFusion/Assignment1.cfm http://mysite.verizon.net/boutros/IntroColdFusion/Wk1Review.rtf
Saturday April 12, 2008	4.75	Reading and Documenting Week2 Online Lectures of Introduction to ColdFusion class - ColdFusion Environment, Variables, and Functions - at http://www.eclasses.org/ Read ColdFusion 8 - Developer Edition) online documentations at:

C:\ColdFusion8\wwwroot\cfdocs\dochome.htm ==
http://127.0.0.1:8500/CFDOCS/dochome.htm ==
http://localhost:8500/CFDOCS/dochome.htm

Sunday April 13, 2008	5.75	Read Introduction to ColdFusion class -Week2- Online reference at: http://en.wikipedia.org/wiki/SQL http://en.wikipedia.org/wiki/ODBC http://en.wikipedia.org/wiki/Data_source_names Finished Second week Homeworks for Intro. To ColdFusion class. Posted it online at: http://mysite.verizon.net/boutros/IntroColdFusion/Assignment2.cfm http://mysite.verizon.net/boutros/IntroColdFusion/Wk2Review.rtf
Monday April 14, 2008	1.5	Documenting Week3 Online Lectures of Introduction to ColdFusion class - Controlling the Flow of Your Template- at http://www.eclasses.org/
Wednesday April 16, 2008	4.25	Book: Mastering ColdFusion MX by Arman Danesh, et. al. Chapter 2: [pages 9 - 16]; Chapter 3: [pages 17 - 30].
Thursday April 17, 2008	2.5	Book: Mastering ColdFusion MX by Arman Danesh, et. al. Chapter 6: [pages 51 - 61]; Chapter 7: [pages 63 - 74].
Friday April 18, 2008	3.0	Book: Mastering ColdFusion MX by Arman Danesh, et. al. Chapter 10: [pages 91 - 103]; Chapter 11: [pages 105 - 116].
Saturday April 19, 2008	2.25	Book: Mastering ColdFusion MX by Arman Danesh, et. al. Chapter 11: [pages 117 - 125]. Read Week3 Online Lectures of Introduction to ColdFusion class - Controlling the Flow of Your Template- at http://www.eclasses.org/
Sunday April 20, 2008	6.25	Read Introduction to ColdFusion class -Week3- Online reference at: http://www.peachpit.com/articles/article.aspx?p=30497&seqNum=9&rll=1 Finished Third week Homeworks for Intro. To ColdFusion cl Posted it online at: http://mysite.verizon.net/boutros/IntroColdFusion/Assignment3.cfm http://mysite.verizon.net/boutros/IntroColdFusion/employee_details.cfm
Monday April 21, 2008	4.0	Documented and Reading Week4 Online Lectures of Introduction to ColdFusion class - SQL: Add Records- at http://www.eclasses.org/ Finished Third week Review Questions for Intro. To ColdFusion class. Posted it online at: http://mysite.verizon.net/boutros/IntroColdFusion/Wk3Review.rtf
Tuesday April 22, 2008	2.5	Read Week4 Online Lectures of Introduction to ColdFusion class - SQL: Add Records- at http://www.eclasses.org/ Working on Fourth week Homeworks for Intro. To ColdFusion class.
Wednesday April 23, 2008	4.5	Working on Fourth week Homeworks for Intro. To ColdFusion class. Read Online References at: http://en.wikipedia.org/wiki/Ajax_programming http://en.wikipedia.org/wiki/Document_Object_Model http://en.wikipedia.org/wiki/Web_2

Thursday April 24, 2008	7.25	Working on Fourth week Homeworks for Intro. To ColdFusion class. Posted it online at: http://mysite.verizon.net/boutros/IntroColdFusion/Assignment4.zip
Friday April 25, 2008	2.75	Finished Fourth week Homeworks for Intro. To ColdFusion class. Posted it online at: http://mysite.verizon.net/boutros/IntroColdFusion/Assignment4.zip
Saturday April 26, 2008	2.75	Book: Mastering ColdFusion MX by Arman Danesh, et. al. Chapter 11: [pages 126 - 130]; Chapter 9: [pages 85 - 90]; Appendix B: [pages 905 - 908] Read Online References at: http://en.wikipedia.org/wiki/Shtml http://en.wikipedia.org/wiki/Web_application_framework http://en.wikipedia.org/wiki/Web_service http://en.wikipedia.org/wiki/Web_document http://en.wikipedia.org/wiki/Web_template
Sunday April 27, 2008	3.25	Book: Mastering ColdFusion MX by Arman Danesh, et. al. Chapter 17: [pages 317 - 327].
Monday April 28, 2008	5.25	Book: Mastering ColdFusion MX by Arman Danesh, et. al. Chapter 17: [pages 328 - 357]. Installed Microsoft .NET Framework 3.5 and Expression Web 2 Beta. Microsoft® Expression® Web is a professional design tool to create modern, standards-based sites that deliver superior quality on the Web. Microsoft Expression Web is a WYSIWYG HTML editor and general web design program by Microsoft, replacing Microsoft FrontPage. It is part of the Expression Studio suite. Expression Web is targeted toward professional website designers. Expression Web 2 gives you all the tools you need to produce high-quality, standards-based Web sites. Built-in support for today's Web standards, sophisticated CSS-based layout and formatting, and integration with either ASP.NET or PHP means you can design, develop, and maintain exceptional sites with a lot less time and effort. Microsoft .NET Framework is a software component that is a part of Microsoft Windows operating systems.
Tuesday April 29, 2008	4.25	Book: Mastering ColdFusion MX by Arman Danesh, et. al. Chapter 18: [pages 387 - 412].
Monday May 5, 2008	4.25	Documented and Reading Week5 & Week6 Online Lectures of Introduction to ColdFusion class - 'SQL: Update, Delete Records' & 'Sending and Receiving E-mail' - at http://www.eclasses.org Researched Online References for My Company Website Hosting and domain name registration at: http://hosting.fastdomain.com/ http://www.lunarpages.com/ http://www.imhosted.com/ http://www.doteasy.com/ http://www.godaddy.com/gdshop/default.asp http://www.ixwebhosting.com/ http://www.top-10-web-hosting.com/ Finished Fifth week Review Questions for Intro. ColdFusion class.

Posted it online at:
http://mysite.verizon.net/boutros/IntroColdFusion/w5_quiz_boutros_answers.html

Tuesday May 6, 2008	9.0	Read Week5 Online Lectures of Introduction to ColdFusion class - SQL: Update, Delete Records - at http://www.eclasses.org/ Working on Fifth week Homeworks for Intro. To ColdFusion class.
Wednesday May 7, 2008	5.5	Finished Fifth week Homeworks for Intro. To ColdFusion class. Posted it online at: http://mysite.verizon.net/boutros/IntroColdFusion/Assignment5.zip
Thursday May 8, 2008	6.0	Read Week6 Online Lectures of Introduction to ColdFusion class - Sending and Receiving E-mail - at http://www.eclasses.org/ Book: Mastering ColdFusion MX by Arman Danesh, et. al. Read Online References at: http://en.wikipedia.org/wiki/MIME Fixed Mail Server Setup in CF Administrator at: http://127.0.0.1:8500/CFIDE/administrator/index.cfm Working on Sixth week Homeworks for Intro. To ColdFusion class.
Friday May 9, 2008	5.25	Finished Sixth week Homeworks for Intro. To ColdFusion class. Posted it online at: http://mysite.verizon.net/boutros/IntroColdFusion/Assignment6.zip
Monday May 12, 2008	3.0	Corrections to Sixth week Homeworks for Intro. To ColdFusion class. Chapter 23: [pages 503 - 526]; Chapter 11: [pages 130 - 149].
Total = 127.75 hrs		

*******End of Introduction to ColdFusion*******
