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This document tracks the time I spent to learn the Online Course "**Advanced Macromedia Flash**", course number **A222.43** taken at **http://www.eclasses.org/** from reading the text book, reading and documenting online lectures, 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 ".30" in A233.30 refers to the number of times the course has been given).

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Total number of hours I spent on **Advanced Macromedia Flash** *(details below)* $= 156.0\,hrs$

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

Advanced Macromedia Flash - course number **A222.43**

Start Date: 12-October-2008; **Duration:** 6 weeks; **CEUs:** 3.0; **Course Number:** A222.43; **Instructor:** Stephane Richer; **Co-Instructor:** Damien Hatcher

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: Advanced Macromedia Flash

There are plenty of exciting notions to see in this class, they are simply the most cutting edge techniques for the most cutting edge application on the web. Despite its appeal, this course is not an easy one. It is actually rather demanding. It will draw from both your creative side AND your analytical side. Many of the programming aspects are quite complex and to be able to

turn these concepts into art can be quite a mind bender. But if you learn to master all that is viewed in this course, you will be amongst the most sought-after web specialists out there.

Outline

Week 1: The Creation and Manipulation of Flash Objects.

- A quick review of intermediate actionscripting notions

- Get a handle on advanced actionscripting

- Learn about Objects and Classes

- Learn to create a Flash Object and manipulate it with code

- The Date Object

- The Mouse Object

Week 2: Scripted Continuous Action

- Show Object content in dynamic textfields

- How to use the 'trace' action to view variables in the Output window

- The Button Object

- The Key Object

- Listeners

- Coding onClipEvents, onEnterFrame, setInterval for continuous action

Week 3: Multi Level Communication

- The Movie Clip Object

- Be able to create and use the complex Color Object

- Swap overlapping movie clips by dynamically changing their depth

- Attaching and removing movie clips to and from the Library

- Spontaneously generate movie clips out of thin air (MX only)

- Generate shapes, lines and colors just with code (MX only)

- Generate dynamic masks and draggable masks

- Communication/interaction between two separate swf movies

- Animating motion with code and user-created functions

- Know how to load external variables so your clients can change web site contents on their own

- Learn to use if/else conditional statements in more complex ways

Week 4: Controlling Sound and Text Dynamically

- Be using the complex Sound Object and its properties

- Create dynamic sound controls to modify independent sounds

- The intricacies of Attaching sounds

- Loading external sounds

- Learn instant loops like while, for and do while to instantly generate art

- Know the many intricacies of textfields

- Generate textfields out of thin air (MX only)

- Easily be able to manipulate the contents of textfields to retrieve or change their content

- The Textfield Object

- The Textformat Object

- The String Object

- The Selection Object to control the focus of editable text

Week 5: The Math and Array Objects

- Be calculating using the Math Object

- Use Sine and Cosine for directional movement

- Calculate distances or angles between objects

- Generate Random numbers to create artistic/natural effects

- Order information with the Array Object

- Learn the secrets of the 'square brackets' to dynamically refer to anything on the Stage

Week 6: Managing Content and Troubleshooting

- Sharing Symbols

- Including external actionscript

- Build reusable scripts

- Create your own custom actions/Objects/Classes with Functions

- Modify already existing Flash actions to fit your needs by modifying the 'Prototype' of Flash Objects (MX only)

- Flash Remoting

- Components

Prerequisites

- You must know the basics of HTML.

- A233 - Intermediate Flash MX

- You should have lots of time to explore, research, experiment, analyze and assimilate the complex notions seen in class. You must know about the web and computers well. Those with sufficient previous flash experience can attend as well, but material covered in both the vast introduction and intermediate classes will be taken for granted and will not be discussed. You also need to have some web storage somewhere on the internet. If you don't have any, there are many free sites available.

Requirements

The full version of Flash CS3, Flash 8, or Flash MX 2004 is required as well as a recent version of one of the 2 main internet explorer web browsers. Netscape Navigator has exhibited difficulties working with native .fla files. To get the most of this class, having a recent version of Internet Explorer installed is encouraged. The minimum system requirements are as follows:

Flash CS3, Flash 8, and Flash MX 2004 work on both the Macintosh and Windows platforms. As a Flash author, you must consider not only the requirements for creating and viewing Flash movies, but also the requirements for viewers of your movie. The following lists MINIMUM system requirements for both activities on both platforms.

To create and edit Flash movies on a MAC:
Processor: Power Macintosh
Operating System: MacOS 8.5 or later
RAM: 32 MB
Free disk space: 40 MB
Monitor: 256 colors, 800X700 resolution

To create and edit Flash movies in Windows:
Processor: 133-MHz Pentium
Operating System: Windows 95, 98, 2000, Me or NT 4.0 or later
RAM: For Windows 95 and 98, 16 MB (24 recommended); for Windows NT, 24 MB (32 MB recommended)
Free disk space: 40 MB
Monitor: 256 colors, 800X700 resolution.

Books

Read Requirement section above for additional instructions for selecting a required book.
Required Book: Flash CS3 Professional Advanced for Windows and Macintosh [by Russell Chun, Paperback, 528 pages, **ISBN**: 0321503031, **Publisher**: Peachpit Press, **Pub.Date**: May 31 2007

Additional Information:

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.

Instructor: Stephane Richer

Stephane Richer is the president of a print and web design company called Noise Communications based in Montreal. Stephane comes from the print design world where he evolved during the 1980's. In the 90's he turned to digital presentations and web design. After years of focusing on HTML/DHTML/CSS designs, Stephane switched to Macromedia's Flash when it was in its 3rd version. He now considers Flash to be one of the most important design tools for creating stunning designs for the web. He has been teaching Flash at our organization since January 2000. In 2001, he started teaching Fireworks and Director classes as well.

Co-Instructor: Damien Hatcher

Damien Hatcher is a web designer who uses primarily flash at noise communication, based in Montreal. He has a B.A in English Literature and has been teaching at our organization since January 2000. Do not hesitate to contact him if you have any questions regarding the flash courses.

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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.

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. TimeSpentToLearnAdvancedFlash.doc
2. Most Documents are in *.html (or *.htm) format.

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Adobe Flash Player is the standard for delivering high-impact, rich Web content. Designs, animation, and application user interfaces are deployed immediately across all browsers and platforms, attracting and engaging users with a rich Web experience.   (.fla == flash movie authoring file, found at: http://www.adobe.com/)

As far as what version of ActionScript (AS) I will use for this course: I will learn mainly AS 3.0, the latest version of the Flash programming Language that lets you control graphics, animation, sound, and interactivity. However ActionScript 3.0 represents a significant change from the previous version (AS 2.0) because in many ways it is conceptually and architecturally different. AS 2.0 is much easier and straight forward to learn than AS 3.0.

ActionScript is the programming language of the Adobe Flash Player runtime. Originally developed as a way for Flash developers to program interactivity, ActionScript enables efficient programming of Adobe Flash applications for everything from simple animations to complex, data-rich, interactive application interfaces.

ActionScript 3.0, introduced in Flash Player 9, is based on ECMAScript—the same standard that is the basis for JavaScript—and provides incredible gains in runtime performance and developer productivity. **ActionScript 2.0**, the version of ActionScript used in Flash Player 8 and earlier, added language constructs and features to enable developers to build large-scale, object-oriented Flash applications and content. AS 2.0 continues to be supported in Flash Player 9.

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Date	Time Spent (hrs)	Description (mainly)
Monday October 13, **2008**	1.25	**Start of Advanced Flash -**course number **A222.43** **Read** and **documented** course materials at http://www.eclasses.org/ Documents **created** are located at: C:\Users\boutros\Documents\MyPrograms\eClasses.Org\ Course_Advanced Flash_A222.43\
Thursday October 16, 2008	3.0	**Documented and Reading**Week1 **Online Lectures** of **Advanced Flash** class - Review - the world of Flash Objects - at **http://www.eclasses.org/**
Friday October 17, 2008	3.75	**Read** Week1 **Online Lectures** of **Advanced Flash** class - Review - the world of Flash Objects - at **http://www.eclasses.org/** **Read week1 Online references:** http://livedocs.adobe.com/flash/ http://www.ultrashock.com/forums/actionscript/

Saturday October 18, 2008	1.25	**Book: Flash CS3 Professional-Advanced** by Russell Chun **Review** Chapter 3: [pages 57 - 75].
Sunday October 19, 2008	3.25	**Book: Flash CS3 Professional-Advanced** by Russell Chun **Review** Chapter 3: [pages 76 - 90]; Chapter 5: [pages 133 - 139].
Monday October 20, 2008	1.5	**Book: Flash CS3 Professional-Advanced** by Russell Chun **Review** Chapter 5: [pages 140 - 150]. **Documented** Week2 **Online Lectures** of **Advanced Flash** class - Extended Movie Clip Capabilities - at **http://www.eclasses.org/**
Tuesday October 21, 2008	2.5	**Book: Flash CS3 Professional-Advanced** by Russell Chun **Read/Review** Chapter 4: [pages 91 - 110].
Wednesday October 22, 2008	2.5	**Book: Flash CS3 Professional-Advanced** by Russell Chun **Read/Review** Chapter 4: [pages 111 - 116]. **Online References:** http://www.adobe.com/devnet/ http://www.flashandmath.com/
Thursday October 23, 2008	3.25	**Book: Flash CS3 Professional-Advanced** by Russell Chun **Read/Review** Chapter 4: [pages 117 - 123].
Friday October 24, 2008	4.5	**Working on First** Homework for Advanced Flash class.
Saturday October 25, 2008	6.25	**Finished First** Homework for Advanced Flash class. Posted it online at: http://bacsoftwareconsulting.com/AdvancedFlash/project1.swf http://bacsoftwareconsulting.com/AdvancedFlash/project1.fla
Sunday October 26, 2008	2.5	**Book: Flash CS3 Professional-Advanced** by Russell Chun **Read/Review**: Chapter 4: [pages 124 - 127]; Chapter 6: [pages 178 - 181].
Monday October 27, 2008	6.5	**Book: Flash CS3 Professional-Advanced** by Russell Chun **Read/Review**: Chapter 6: [pages 182 - 187; 200 - 208]. **Reworked my First** Homework for Advanced Flash class. **Documented** Week3 **Online Lectures** of **Advanced Flash** class - Magic tricks with movie clip symbols (mcs) - at **http://www.eclasses.org/**
Wednesday October 29, 2008	6.5	**Book: Flash CS3 Professional-Advanced** by Russell Chun **Read/Review**: Chapter 7: [pages 224 - 240]. **Read** Week2 **Online Lectures** of **Advanced Flash** class - Extended Movie Clip Capabilities - the world of Flash Objects - at **http://www.eclasses.org/** **Read week2 Online references:** http://www.adobe.com/products/flashmediaserver/
Thursday October 30, 2008	2.5	**Book: Flash CS3 Professional-Advanced** by Russell Chun **Read/Review**: Chapter 7: [pages 241 - 242].
Monday November 3, 2008	1.75	**Book: Flash CS3 Professional-Advanced** by Russell Chun **Read**: Chapter 7: [pages 243 - 248].

Tuesday November 4, 2008	3.75	**Book: Flash CS3 Professional-Advanced** by Russell Chun **Read**: Chapter 7: [pages 249 - 265].
Wednesday November 5, 2008	4.0	**Book: Flash CS3 Professional-Advanced** by Russell Chun **Read**: Chapter 7: [pages 266 - 276]. **Documented** Week4 **Online Lectures** of **Advanced Flash** class - Controlling sound & text (plus a review on variables) - at **http://www.eclasses.org/**
Thursday November 6, 2008	3.5	**Book: Flash CS3 Professional-Advanced** by Russell Chun **Read**: Chapter 7: [pages 277 - 279]. **Read** Week3 **Online Lectures** of **Advanced Flash** class - Magic tricks with movie clip symbols (mcs) - at **http://www.eclasses.org/**
Friday November 7, 2008	7.0	**Finished Second** Homework for Advanced Flash class. Posted it online at: http://bacsoftwareconsulting.com/AdvancedFlash/project2.swf http://bacsoftwareconsulting.com/AdvancedFlash/project2.fla
Saturday November 8, 2008	3.0	**More Work to my Second** Homework for Advanced Flash class.
Monday November 10, 2008	1.25	**More Work to my Second** Homework for Advanced Flash class.
Wednesday November 12, 2008	1.25	**Documented** Week5 **Online Lectures** of **Advanced Flash** class - The dreaded Math Object, Arrays and custom Classes - at **http://www.eclasses.org/**
Saturday November 15, 2008	3.0	**Read week5 Online reference:** http://www.clarku.edu/~djoyce/trig/ http://www.geomancy.org/sacred-geometry/index.html **Book: Flash CS3 Professional-Advanced** by Russell Chun **Read**: Chapter 11: [pages 433 - 440].
Sunday November 16, 2008	4.5	**Book: Flash CS3 Professional-Advanced** by Russell Chun **Read**: Chapter 11: [pages 441 - 457].
Monday November 17, 2008	4.5	**Book: Flash CS3 Professional-Advanced** by Russell Chun **Read**: Chapter 11: [pages 458 - 462]. **Read** Week5 **Online Lectures** of **Advanced Flash** class - Math Object, Arrays and custom Classes - at **http://www.eclasses.org/**
Tuesday November 18, 2008	2.5	**Documented** Week6 **Online Lectures** of **Advanced Flash** class - Managing content and troubleshooting - at **http://www.eclasses.org/** **Working on Third** Homework for Advanced Flash class.
Wednesday November 19, 2008	7.0	**Finished Third** Homework for Advanced Flash class. Posted it online at: http://bacsoftwareconsulting.com/AdvancedFlash/project3.swf http://bacsoftwareconsulting.com/AdvancedFlash/project3.fla
Sunday November 23, 2008	2.25	**Coding** Miscellaneous Advanced Flash exercises. Check online reference at: http://flashmymind.com/

Friday November 28, 2008	1.75	**Continue**-**Coding** Miscellaneous Advanced Flash exercises.
Saturday November 29, 2008	1.25	**Continue**-**Coding** Miscellaneous Advanced Flash exercises.
Sunday November 30, 2008	2.75	**Finished**-**Coding** Miscellaneous Advanced Flash exercises.
Monday December 1, 2008	1.25	**More Work** on my Second Homework (different version and different design idea and coding).
Tuesday December 2, 2008	1.5	**Designed** and **Coded** my second idea for my Second Homework for the Advanced Flash course.
Thursday December 4, 2008	1.75	**Reading** Week6 **Online Lectures** of **Advanced Flash** class - Managing content and troubleshooting - at **http://www.eclasses.org/ Read week6 Online reference:** http://www.mcs.surrey.ac.uk/Personal/R.Knott/Fibonacci/fib.html http://www.adobe.com/cfusion/exchange/ http://livedocs.adobe.com/flash/9.0/ActionScriptLangRefV3/compilerErrors.html
Saturday December 6, 2008	2.75	**Read** Week6 **Online Lectures** of **Advanced Flash** class - Managing content and troubleshooting - at **http://www.eclasses.org/ Book: Flash CS3 Professional-Advanced** by Russell Chun **Read**: Chapter 7: [pages 280 - 298].
Sunday December 7, 2008	2.75	**Book: Flash CS3 Professional-Advanced** by Russell Chun **Read**: Chapter 7: [pages 299 - 302]; Chapter 8: [pages 303 - 309].
Monday December 8, 2008	1.5	**Book: Flash CS3 Professional-Advanced** by Russell Chun **Read**: Chapter 8: [pages 310 - 312].
Tuesday December 9, 2008	3.25	**Book: Flash CS3 Professional-Advanced** by Russell Chun **Read**: Chapter 8: [pages 313 - 330].
Wednesday December 10, 2008	2.25	**Read week5 Online references: RegExp** and **E4X** http://livedocs.adobe.com/flash/9.0/main/wwhelp/wwhimpl/common/html/wwhelp.htm?context=LiveDocs_Parts&file=00000112.html http://dispatchevent.org/roger/as3-e4x-rundown/ **Book: Flash CS3 Professional-Advanced** by Russell Chun **Read**: Chapter 11: [pages 463 - 470].
Tuesday December 23, 2008	1.0	**Book: Flash CS3 Professional-Advanced** by Russell Chun **Read**: Chapter 9: [pages 333 - 337].
Wednesday December 24, 2008	0.75	**Book: Flash CS3 Professional-Advanced** by Russell Chun **Read**: Chapter 9: [pages 338 - 339].
Thursday December 25, 2008	1.25	**Book: Flash CS3 Professional-Advanced** by Russell Chun **Read**: Chapter 9: [pages 340 - 346].
Friday December 26, 2008	2.0	**Book: Flash CS3 Professional-Advanced** by Russell Chun **Read**: Chapter 9: [pages 347 - 356].
Saturday December 27, 2008	1.5	**Book: Flash CS3 Professional-Advanced** by Russell Chun

Read: Chapter 9: [pages 357 - 365].

Monday December 29, 2008	1.25	**Book: Flash CS3 Professional-Advanced** by Russell Chun **Read**: Chapter 9: [pages 366 - 369].
Thursday January 1, 2009	1.25	**Book: Flash CS3 Professional-Advanced** by Russell Chun **Read**: Chapter 9: [pages 370 - 374].
Friday January 2, 2009	1.75	**Book: Flash CS3 Professional-Advanced** by Russell Chun **Read**: Chapter 12: [pages 471 - 481].
Saturday January 3, 2009	3.0	**Book: Flash CS3 Professional-Advanced** by Russell Chun **Read**: Chapter 12: [pages 482 - 496]; Chapter 10: [pages 375 - 385].
Sunday January 4, 2009	2.0	**Book: Flash CS3 Professional-Advanced** by Russell Chun **Read**: Chapter 10: [pages 386 - 397].
Monday January 5, 2009	1.0	**Book: Flash CS3 Professional-Advanced** by Russell Chun **Read**: Chapter 10: [pages 398 - 404].
Thursday March 12, 2009	3.75	**Learned** on using a Flash web tool at: http://www.houseofforgings.net/designcenter/ http://www.pecancreeksoftware.com/
Friday March 20, 2009	1.0	**Book: Flash CS3 Professional-Advanced** by Russell Chun **Read**: Chapter 10: [pages 405 - 407].
Saturday March 21, 2009	1.75	**Book: Flash CS3 Professional-Advanced** by Russell Chun **Read**: Chapter 10: [pages 408 - 416].
Sunday March 22, 2009	3.0	**Book: Flash CS3 Professional-Advanced** by Russell Chun **Read**: Chapter 10: [pages 417 - 428].
Monday March 23, 2009	2.5	**Installed** Google Chrome 1.0 Browser at: http://www.google.com/chrome **Read** Miscellaneous online references and tutorials.
Friday March 27, 2009	3.25	**Read Miscellaneous Online References and tutorials:** http://blog.greensock.com/tweenmaxas3/ http://tutorials.flashmymind.com/
Saturday March 28, 2009	1.0	**Read Miscellaneous Online References and tutorials:** http://blog.greensock.com/tweenmaxas3/ http://tutorials.flashmymind.com/

Total = 156.0 hrs

******* *End of Advanced Flash* ******
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