



Prerequisites:

Students who have taken the Flash Level 1 Essentials course or equivalent experience.

Who Should Attend:





This course is designed for Flash designers and developers looking to become more familiar with ActionScript, the Flash programming language. Real world projects are created focusing on more sophisticated interactions and making swf's dynamic all from a programming perspective.

Course Duration:

3 days. Class time is 9:00 am – 4:30 pm.

There is an hour for lunch, and two scheduled breaks during the day. Students provide their own lunch.

Related Training:

-  Adobe Flash CS5: Timeline & Animation Techniques
-  Adobe Flash Catalyst CS5
-  Adobe Dreamweaver CS5
-  Adobe Flex 4

Adobe Flash CS5: ActionScript 3 Foundations

This course covers fundamental programming techniques in Flash with a more formal discussion of Object-Oriented Programming concepts and how they are implemented in ActionScript 3. Variables, conditionals, loops, event handling and animation will be discussed while working on practical realistic projects. The Built-in ActionScript classes will be focus with perhaps some minor custom class creation. Script Assist will not be used in this course.

Instructor

Our instructor, Tom Edgar, has a Bachelor of Science degree in Advertising Art Direction. With over ten years of Flash instruction behind him, Tom has unmatched expertise in Adobe Flash. In June of 2008 Tom was ranked as the number one Adobe trainer worldwide based on student evaluations. Tom has been with us for ten years, His uncommon and oft-praised rapport with students helps to put them at ease with subject material that otherwise might be imposing. Tom is certified by Adobe to teach any and all Flash, Flex, Fireworks, and Captivate classes currently on our schedule.

This outline is flexible and may change to accommodate student skills and interests.



Introducing ActionScript 3

- Flash Player compatibility
- ActionScript Virtual Machines
- Flash Player Penetration
- Object.property / Object.method syntax

Event Handling in AS3

- Writing Custom Functions
- Working with Listeners
- Event Objects and Listeners

Controlling MovieClips

- Using Listeners and Functions for MovieClip Control
- Working with Nested Clips
- Using MovieClip Methods
- Target paths and parent

Coding with Variables & Object Props

- Creating and Datatyping Variables
- Variable Scope
- Modifying MovieClip Properties
- Using Intermediate and Flag Variables
- Working with the Equality Operator
- Using Conditionals, if/else, switch/case

Debugging Tools

- Writing Trace Statements
- Using Debugger mode
- Applying Breakpoints
- Comments

Loader Class

- What is a Constructor function?
- Writing Constructors: Loader and URLRequest
- What is the Display List?
- Using NavigateToURL method
- Using the Loader Object to create multipage Flash Websites
- Loading Dynamic swf files at runtime

Using the Event Object to Abstract Functions

- Use a conditional to enable/disable loading of dynamic swf files
- Convert 6 earlier functions to one function via Event Object
- Understand key Event Object properties
- Using target.name property of Event Class
- Event Propagation & Bubbles

Preloaders

- Understanding the Bandwidth Profiler
- Creating a preloading animation.
- Handling Progress and Complete Events
- Displaying Percentages
- Animation Alternatives

Classes, Packages, and Classpaths

- Custom Classes and External .as files
- Packages explained
- Classpaths – Global vs Per FLA
- Using Import Statements

Working with Components

- TextArea vs UIScrollbar
- Creating Dynamic Textfields
- Using the URLLoader Class
- Loading external text with html formatting
- Component packages
- Customizing Component Skins
- Supported HTML and CSS in Flash

Custom Function with Parameters

- Listeners function = no parameters
- Switch- Case statements

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External Text

- Create a Textfield Object with code
- Working with Textformat Objects
- Using the with operator
- Loading External Text
- Font Symbols and Embedding
- Dataformat and name-value pairs
- Text Area Component

Dynamic Evaluation / Square Braces

- Extracting specific loaded variables
- Using square braces / array access to dynamically evaluate

Animating with ActionScript

- EnterFrame mechanics
- Timer mechanics
- Pros and Cons
- Using Timer Class for Programmatic Animation
- Using the Tween & Transition classes to Animate with Code

External XML

- Loading External XML
- Creating XML Objects
- Parsing XML using E4X
- Populating Components with XML
- Handling Events

Introducing Sprite Objects

- Creating Sprites
- Using Transform and Color Transform

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