Flash Web Sites

2010

:: Agenda

- Introductions
- Look at a few Flash Examples
    - Flash Web Sites
    - Flash Web Applications
    - Flash Games
    - Flash Stand-alone Presentations
- Lesson: Intro to ActionScript
- Exercise: Building a Simple Flash Web Site
- Exercise: Building an Intermediate-Advanced Flash Web Site
- Bonus
    - Alternative Flash Interfaces
    - Flash Banner Ads
    - More…

:: Lesson – Intro to ActionScript

- ActionScript is Adobe Flash's programming language. It enables you to make your Flash content interactive and provides a more efficient way to do things in Flash, from creating simple animations through designing complex, data-rich, interactive application interfaces.

- The latest version is Actionscript 3.0 which came out recently with the release of Flash player 9 and Flash CS3.

:: Lesson – Intro to ActionScript

- Good practices
  - Always indent your code
  - Always try to keep your code in one place
    - Suggestion: keep all actions in one frame on the main time line (unless you are working on a large-scale site – you can use classes and other advanced techniques)
    - This makes your code easy to find and easy to debug
    - AVOID ATTACHING CODE TO OBJECTS!
  - Be careful of your use of capitalization. Flash is case sensitive.

:: Lesson – Intro to ActionScript

- Terminology:
    - Data
    - Variables
    - Statements
    - Actions
    - Expressions
    - Operands and operators
    - Dot syntax
    - Punctuators
    - Constants
    - Keywords
    - Events
    - Event Handlers

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- Statements and "Actions"
  - Learning ActionScript syntax (Syntax: the grammatical structure of language) and statements is like learning how to put together words to make sentences, which you can then put together into paragraphs. ActionScript can be as simple. For example, in English, a period ends a sentence; in ActionScript, a semicolon ends a statement.
  - A statement is an instruction you give the FLA file to do something, such as to perform a particular action.

- stop();
- gotoAndStop(25);

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- Action parameters
  - The properties and values that go inside of an action.

- gotoAndPlay(frame number or label);
- gotoAndStop(frame number or label);

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- Expressions
  - Expressions, different from statements, are any legal combination of ActionScript that represent a value. Expressions have values, while values and properties have types. An expression can consist of operators and operands, values, functions, and procedures. The expression follows ActionScript rules of precedence and of association. Typically, Flash Player interprets the expression and then returns a value that you can use in your application.

- x = 5;
- x = (y + 5) / 10;

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- Operands and Operators
  - Operators are characters that specify how to combine, compare, or change values in an expression. An expression is any statement that Flash can evaluate and that returns a value. You can create an expression by combining operators and values or by calling a function.
  - An operand is the part of your code that the operator performs actions on.
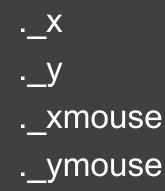
- x = 5;

  - x and 5 are operands and + is an operator.

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- Properties
  - values associated with movie clips.

    ._x

    ._y

    ._xmouse

    ._ymouse

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- Punctuators
  - Punctuators are the characters that help form your ActionScript code. There are several language punctuators in Flash. The most common type of punctuators are semicolons (;), colons (:), parentheses [()] and braces ({}).

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- Keywords
  - Keywords in ActionScript are reserved words used to perform specific kinds of actions, so you can't use them as identifiers (such as variable, function, or label names). Examples of some reserved keywords are if, else, this, function, and return. Keywords turn blue in the actions panel.

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- Events
  - Events are actions that occur while a SWF file is playing. An event such as a mouse click or a keypress is called a user event because it occurs as a result of direct user interaction. An event that Flash Player generates automatically, such as the initial appearance of a movie clip on the Stage, is called a system event because it isn't generated directly by the user.

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- Event Handlers
  - An event handler method is a method of a class that is invoked when an event occurs on an instance of that class.

    event:MouseEvent

    addEventListener(MouseEvent.CLICK)

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- dot (.) syntax
  - In ActionScript, you use a dot (.) operator (dot syntax) to access properties or methods that belong to an object or instance on the Stage. You also use the dot operator to identify the target path to an instance (such as a movie clip), variable, function, or object.
  - A dot syntax expression begins with the name of the object or movie clip, followed by a dot, and it ends with the element you want to specify.

  noun.action

  movieclip.action

  mc_nestedContent.gotoAndStop("about");

  b_myButton.addEventListener(MouseEvent.CLICK, myFunction);

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- Targeting an instance, and nested instances

  movieclip.nestedmovieclip.action

  movieclip.stop();

  mc_content.mc_nestedContent.gotoAndStop
      ("about_sub3");

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- How to comment code:
  - blocks of text: /* and */
  - one line at a time: //

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- Common actions & Event Handlers
  - Button & Mouse events

```
//as3 import class
import flash.events.MouseEvent;

//as3 button code
myButton.addEventListener(MouseEvent.CLICK, myFunction);

//as3 button functions
function myFunction(event:MouseEvent):void {
    //action goes here
}
```

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