

HOUR 15: Basic Interactivity

ActionScript is a **scripting language**, a high-level programming language that is often an add-on to another program – like JavaScript is to HTML or Visual Basic Script to Excel.

A **script** is made up of **statements** that include **code**

Actions are the instructions in a script

Unless something stops it, a movie goes from one frame to the next and starts over after the last frame.

Frame **label** – name of a keyframe in a layer, stays with frame even if number changes

Frame **actions** – code in a keyframe that executes when the frame is reached.

Syntax – programming grammar. At least four rules are evident in `gotoAndPlay("Loop Start");`

(1) action spelled correctly in "camel case" (neither `gotoandPlay` nor `goAndPlay` work)

(2) parameter in parentheses, (3) frame label in quotes, (4) ends with semicolon

In `stop();` there are no parameters, but parentheses are still required.

Style – accepted *norms* that make things easier, but are not required

Put scripts in a separate "actions" layer

Use frame labels (not frame numbers) in scripts

Use layers to easily access objects – and name the layers

Use reusable movie clips to separate tasks, rather than putting everything on the main time line

Camel Case – create names that combine words with upper case in the middle – e.g., `myButton`

Button – a kind of symbol, like a movie clip or a graphic. It has four **states** – up, over, down, hit

Events – things that happen (like a user pressing a key) that ActionScript is aware of and can respond to.

Event **handling** – specifying actions to be performed in response to an event

Event **source** or **target** – where the event is going to happen (e.g., a button that will be clicked)

Event **listener** – a script that tells Flash to listen for an event that is "broadcast" by a source

```
eventSource.addEventListener(EventType.EVENT_NAME, eventHandlerName);  
  
function eventHandlerName(dataFromTheEvent)  
{  
    doSomething();  
}
```

Function – a named block of code that carries out specific tasks and can be reused.

Method – an action that can be performed by an object

Property – a piece of data about an object. For example, movie clips have properties like rotation and

alpha. Properties are coded like this: `objectName.property`

`square.x = 100;` tells Flash to set the x property of the object named "square" to 100.