Lecture Two: Functions & Event Handlers

## Functions – p. 25

- A JavaScript function can be passed arguments, or parameters, specifying the value or values
  that the function is to operate upon
- A JavaScript function contains a set of JavaScript statements that will perform a task
- A JavaScript function is defined once, but can be executed, invoked or called many times
- A JavaScript function can also return a value

```
function saySomething(message) {
    alert(message);
}

// The function here is defined by using the keyword "function"

// The function is then given a "functionName" defined by the author

// The functionName then uses the parenthesis operator, which is used to invoke a function and holds the parameters of the function

// The statement of the function, which is the body of the function held within curly brackets and separated by semi-colons, is what actually performs the task(s) of the function(s)
```

## **Event Handlers**

- JavaScript deals with events that the user performs while visiting your page using commands called event handlers
- A JavaScript event handler is written within an HTML tag and triggers events that the user (or the page) should perform
- A JavaScript event handler assigns a function directly to the value of the event handler

```
onclick="saySomething('Four score and seven years ago...')"

// the event-handler is located within the anchor tag of your link

// the value of the event-handler is the "function which it calls"

// The value of this assignment calls the function with a string-value
```

## One New Window

```
function newWindow() {
   window.open("images/pixel2.jpg", "catWin", "width=330,height=250")
   }
// This function "newWindow" does not state parameters to be defined by
the link
// Instead the function leaves its parenthesis empty and uses the
statement "window.open" to define the parameters
// Notice that these parameters are written as a string-value within
double quotes and separated by commas
<a href="javascript:newWindow()">Pixel</a>
// Another way to simulate the "onClick" event-handler is to simply
call the javascript directly from the anchor tag as a standard link
// To do so, you assign the value of the link as the name of the
function called by the word "javascript" with a colon
// Notice, also, that if the parameters are defined by the function's
statement
// this example leaves the parenthesis of the funcName within the anchor
tag blank
```

## **Multiple New Windows**

```
function newWindow(winURL, winName, winFeatures) {
    view = window.open(winURL, winName, winFeatures);
    view.focus();
    }

// This function "newWindow" states three parameters to be defined by
the event handler, thus being practical to open new windows with values
defined only by the user event

<a href="#"
onClick="newWindow('newwindow.html','NewWindow',',width=500,height=500')
">New Window</a>

// The "onClick" event-handler is located within the anchor tag of your
link

// the value of the event-handler is the "function which it calls"
within double quotations
```

 $\ensuremath{//}$  The value of this assignment calls the  ${\bf function}$  with  ${\bf parameters}$  defined within the parenthesis

 $\ensuremath{//}$  The parameter values are written within single quotation marks and separated by commas

// notice that the value for "winFeatures" contains multiple  ${\bf values}$  separated by commas within its single quotation marks