



Javascript Functions

Introduction

- ▶ To keep the browser from executing a script when the page loads, you can put your script into a function.
- ▶ A function contains code that will be executed by an event or by a call to that function.
- ▶ You may call a function from anywhere within the page (or even from other pages if the function is embedded in an external .js file).

Java script Functions

- ▶ The keyword **function** used to define a function (subroutine):

```
function add(x,y)  
{  
    return (x+y) ;  
}
```

- ▶ Functions can be defined both in the <head> and in the <body> section of a document. However, to assure that the function is read/loaded by the browser before it is called, it could be wise to put it in the <head> section.

Function example

```
<html>
<head>
  <title>Even Number Tester</title>
  <script type="text/javascript">
    function isEven(n)
      // Assumes: n > 0  Returns: true if n is even
      number
    {
      if (n%2==0)
        return true;
      else
        return false;
    }
  </script>
</head>
<body>
  <script type="text/javascript">
    testNum = parseFloat(prompt("Enter a positive
      integer", "7"));
    if (isEven(testNum)) {
      document.write(testNum + " is an <b>Even</b>
        number.");
    }
    else {
      document.write(testNum + " is an <b>odd </b>
        number.");
    }
  </script>
</body>
</html>
```

function
definitions go in
the HEAD

HEAD is loaded
first, so the function
is defined before
code in the BODY
is executed

Window and Document

- ▶ The Window object represents the window in which the document containing the script is being displayed
- ▶ The Document object represents the document being displayed using DOM
- ▶ Window has two properties
 - ▶ `window` refers to the Window object itself
 - ▶ `document` refers to the Document object
- ▶ The Window object is the default object for JavaScript, so properties and methods of the Window object may be used without qualifying with the class name

Screen Output and Keyboard Input

- ▶ Standard output for JavaScript embedded in a browser is the window displaying the page in which the JavaScript is embedded
- ▶ The write method of the Document object write its parameters to the browser window
- ▶ The output is interpreted as HTML by the browser
- ▶ If a line break is needed in the output, interpolate `
` into the output

Calling JavaScript function in an Anchor Tag

```
<html>
<head>
<script language="JavaScript">
function anchor_test()
{
    window.alert("This is an anchor test.")
}
</script>
</head>
<body>
<a href="javascript:anchor_test()">Test</a>
</body>
</html>
```

[Demo](#)

Exercise (15 mins)

Write HTML files and Javascript scripts for the following

Input : Three Numbers, using prompt to get each.

Output: The largest of the three input numbers

Write a function : findLarge()

Errors in Scripts

- ▶ JavaScript errors are detected by the browser
- ▶ Different browsers report this differently
 - ▶ Firefox uses a special console
- ▶ Support for debugging is provided
 - ▶ In IE 7, the debugger is part of the browser
 - ▶ For Firefox 2, plug-ins are available
- ▶ The default settings for IE7 provide no debugging help for JavaScript.

```
<html>
<head><title>My Java Script-page</title></head>
<script type="text/javascript">
var num = new Array(10)
var i;
  for (i=0; i<5; i++
    {
      number=prompt("Enter a number : ","0");
      num[i]=number;
    }
</script>
<body>
</body>
</html>
```

Error in code
')' missing

