

IT350 Web and Internet Programming

Fall 2006

SlideSet #7: Intro to JavaScript

(from Chapter 7 of the text)

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JavaScript Intro – Outline

- What is it good for?
- What does it look like?
- Is it Java?
- Example Usage

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```

1 <?xml version = "1.0"?>
2 <!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN"
3   "http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
4
5 <!-- Fig. 7.4: welcome4.html -->
6 <!-- Printing multiple lines in a dialog box -->
7
8 <html xmlns = "http://www.w3.org/1999/xhtml">
9   <head><title>Printing Multiple Lines in a Dialog Box</title>
10
11   <script type = "text/javascript">
12     <!--
13     window.alert( "welcome to\nJavaScript\nProgramming!" );
14     // -->
15   </script>
16
17 </head>
18
19 <body>
20   <p>Click Refresh (or Reload) to run this script again.</p>
21 </body>
22 </html>

```

welcome4.html
1 of 1



Java vs. JavaScript

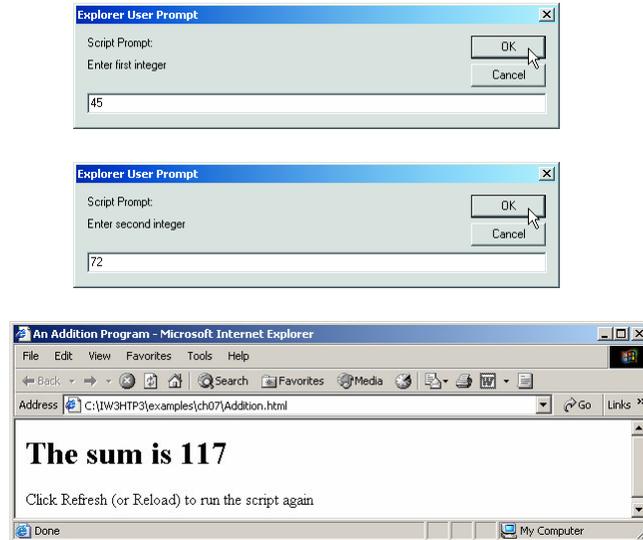
Object-oriented?

Add methods/properties to
objects at run-time?

Variable typing?

C-like expressions, control?

Addition / Strings Example – Part 1



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Addition / Strings Example – Part 2

```
<?xml version = "1.0"?>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
<html xmlns = "http://www.w3.org/1999/xhtml">
  <head>
    <title>An Addition Program</title>
    <script type = "text/javascript">
      <!--
        var firstNumber, secondNumber, number1, number2, sum;

        // read in first number from user as a string
        firstNumber = window.prompt( "Enter first integer", "0" );

        // read in second number from user as a string
        secondNumber = window.prompt( "Enter second integer", "0" );

        // convert numbers from strings to integers
        number1 = parseInt( firstNumber );
        number2 = parseInt( secondNumber );

        // add the numbers
        sum = number1 + number2;

        // display the results
        document.writeln( "<h1>The sum is " + sum + "</h1>" );
      <!-->
    </script>
  </head>
  <body>
    <p>Click Refresh (or Reload) to run the script again</p>
  </body>
</html>
```

addition.html

Objects and Control Flow – Part 1



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Objects and Control Flow – Part 2

```
<html xmlns = "http://www.w3.org/1999/xhtml">
<head> <title>Using Relational Operators</title>
<script type = "text/javascript">
<!--
var now = new Date(); // current date and time
    hour = now.getHours(); // current hour (0-23)

// determine whether it is morning
if ( hour < 12 )
    document.write( "<h1>Good Morning, " );

// determine whether the time is PM
if ( hour >= 12 )
{
    // convert to a 12 hour clock
    hour = hour - 12;

    // determine whether it is before 6 PM
    if ( hour < 6 )
        document.write( "<h1>Good Afternoon, " );

    // determine whether it is after 6 PM
    if ( hour >= 6 )
        document.write( "<h1>Good Evening, " );
}
document.writeln( "the date is: " + now + "</h1>" );
// -->
</script>
</head>
<body>
<p>Click Refresh (or Reload) to run this script again.</p>
</body>
</html>
```

Operators and Precedence

Operators	Associativity	Type
* / %	left to right	multiplicative
+ -	left to right	additive
< <= > >=	left to right	relational
== !=	left to right	equality
=	right to left	assignment

Fig. 7.17 Precedence and associativity of the operators discussed so far.

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Exercise #1 -- What's the output?

```
var a, b, c;

a = 1;
b = 2;
c = 3;

d = a + b * c;

window.alert("<h1>Begin</h1>");

if (d < 20)
    window.alert("d is okay: "+d);
else
    window.alert("d is too high!:"+ d);
    d = d - 3;

document.writeln("<h1>Done. Final d = "+d+"</h1>");
```

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Exercise #2 -- What's the output?

```
var x, y, z;

x = 7;
y = 9;
z = "abc";

window.alert(x+y+z);

window.alert(z+y+x);

if (x)
    window.alert("x true");

x = "seven";

window.alert(x+y+z);
```

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Exercise #3

- Write a JavaScript snippet to read in a number from the user and output its absolute value.

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Exercise #4

- Write a JavaScript snippet to read in three numbers x, y, z and output them in sorted order.

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