

## JavaScript/JScript

- ❖ Web browser contains the **JavaScript Interpreter**, which processes JavaScript commands.
- ❖ JavaScript often appears in the `<head>` section of the XHTML document. The browser interprets the contents of the `<head>` section first, before the `<body>` of the XHTML document is rendered.
- ❖ JavaScript is **Case Sensitive**
- ❖ All **Keywords** are lower case
- ❖ **White space ignored** = spaces, tabs, new lines.

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## XHTML `<script>` Element

- ❖ `<script>` element indicates to browser that text that follows is part of a script.
  - ◆ **type** attribute specifies type of file and scripting language
  - ◆ Both Microsoft IE and Netscape use JavaScript as the default scripting language.

```
<script type = "text/javascript">  
    script code statements;  
</script>
```

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## JavaScript Comments

- ❖ Single-line comments `//`
- ❖ Multi-line comments `/* This is a comment */`
- ❖ Browser that does not support scripts, ignores the `<script>` element and the script code.
- ❖ I do not agree with the text book about the XHTML comment lines within script element. Delete the `<!--` and `// -->` lines.
- ❖ All JavaScript statements end with a semicolon `;`
- ❖ JavaScript writes XHTML and browser renders XHTML.

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## JavaScript Output

- ❖ **document.writeln**
- ❖ **Object** is **document**
- ❖ **Method** is **writeln**



```
<html>  
<head>  
  <title>A First Program in JavaScript</title>  
  <script type="text/javascript">  
    document.writeln( "<h3>Hello World!</h3>" );  
  </script>  
</head>  
<body> </body>  
</html>
```

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## JavaScript Output Method Statements

- ❖ **writeln** = sends output string to body and appends with new line
- ❖ **write** = sends output string to body

```
<html>
<head>
  <title>Printing a Line with Multiple Statements</title>
  <script type="text/javascript">
    document.write( "<h2 style='color: #FF0000'>Welcome to " );
    document.writeln( "Hello World 2!</h2>" );
  </script>
</head>
<body>
</body>
</html>
```



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## JavaScript Output Using Styles

- ❖ Inline style used for text format
- ❖ Special Character \"
- ❖ String Concatenation Operator +

```
<html>
<head>
  <title>Using Styles in output</title>
  <script type="text/javascript">
    document.write("<h2 style = 'color:#00FF00'>" );
    document.write( "Welcome to output " +
      "using styles! </h2>" );
  </script>
</head>
<body> </body>
</html>
```



## JavaScript Character Strings

- ❖ Character Strings are denoted by enclosing text in either 'single' or "double quotes"
- ❖ Special Characters must use a backslash preceding the specification

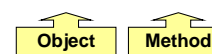
Text string special character specifications

\n = new line	\\ = backslash
\" = double quote	' = single quote
\t = tab	\r = carriage return

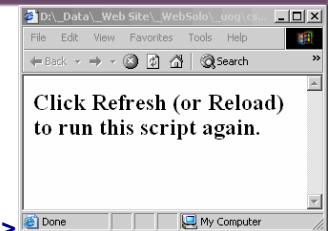
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## JavaScript Alert Window

- ❖ **window.alert**



```
<html>
<head>
  <title></title>
  <script type="text/javascript">
    window.alert( "Welcome to\nJavaScript\nProgramming!" );
  </script>
</head>
<body>
  <h2>Click Refresh (or Reload)<br />
  to run this script again.</h2>
</body> </html>
```



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