

Enhancing Web Pages

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COMMON ELEMENTS

- | | | |
|-----|---------------|---|
| [1] | Text | - can be different sizes, fonts, and colors |
| [2] | Images | - GIF compression for simple comic-like graphics
- JPG compression for photographs |
| [3] | Links/Targets | - to other pages or within the current page |
| [4] | Tables | - may be shown with borders, various alignments, etc. |
| [5] | Lists | - may be lettered, numbered or bulleted |

SIMPLE ADDITIONS

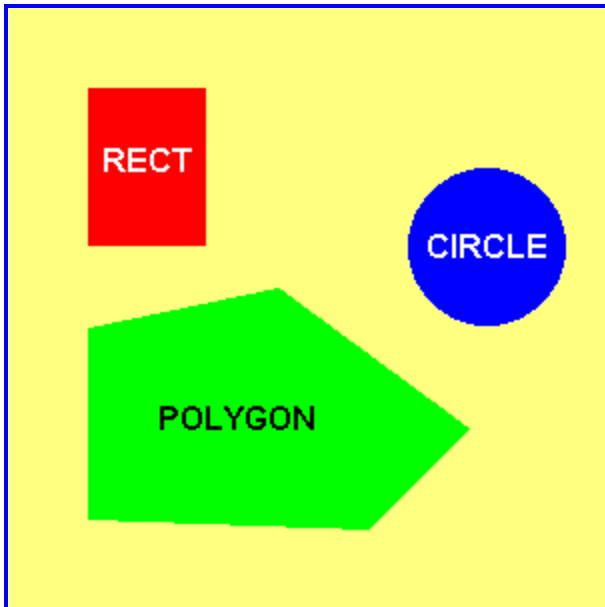
- | | | |
|-----|-----------------------|--|
| [1] | Animated GIFs | - allows 2 or more GIFs to be animated with different time delays between images. They may repeat any number of times. I've used a GIF Construction Set found at:
http://www.mindworkshop.com/achemy/alchemy.html |
| [2] | Client-side image map | - an image where different shaped parts are used as links to other pages or parts of that page |
| [3] | Forms | - allows the user to fill out forms that may be interpreted by internally by JavaScript, or externally by email, CGI, or Java, etc. |
| [4] | Frames | - allows several windows to co-exist on the screen |

FULL-SCALE PROGRAMMING LANGUAGES

- CGI & PERL - CGI (Common Gateway Interface) are languages used for data searches, fill-out forms, etc.
- Visual BASIC - an outgrowth of the origin BASIC (1965) and Quick BASIC currently available since Internet Explorer 4. It is a programming language that is used on many non-Internet applications as well.
- JAVA - developed by Sun Microsystems - it is an advanced graphics language that will perform on any platform. Stand-alone programs are compiled and added to HTML pages. Some good examples can be seen on news.com sites such as foxnews, cnn, msnbc, or espn

SCRIPT LANGUAGE

- | | |
|-------------------|---|
| JavaScript | - is a scripting language that is added/embed within an HTML file used to create special effects and interactivity with the user. Many internal activities that are done in the above languages can also be done in JavaScript. JavaScript is not a stand-alone programming language. |
|-------------------|---|

**Code:**

```
<MAP NAME="pict">  
<AREA SHAPE="RECT" COORDS="40,40,100,120" href="url1.htm">  
<AREA SHAPE="CIRCLE" COORDS="240,120,40" href="url2.htm">  
<AREA SHAPE="POLY" COORDS="40,160,40,255,180,260,230,210,135,140"  
  href="url3.htm">  
<AREA SHAPE="RECT" COORDS="0,0,300,300" href="url4.htm">  
</MAP>  
<IMG SRC="clientmap.gif" USEMAP="#pict">
```

This is a sample form

Checkboxes: 0, 1, or 2 may be checked.

- This is checkbox #1
 This is checkbox #2

Radio buttons: only one at a time may be selected.

- Choice A
 Choice B
 Choice C

Drop-down menu: please select any one.

Option 1

This is a small text field!

This is a textarea. It can hold much more text than a text field and display it easily, including scrollbars. Pretty useful!

Submit

Original Settings

Code to create form:

```
<FORM METHOD="GET">
  <b>Checkboxes: 0, 1, or 2 may be checked.</b><br>
  <INPUT TYPE="checkbox" NAME="cb1" CHECKED> This is checkbox #1<br>
  <INPUT TYPE="checkbox" NAME="cb2"> This is checkbox #2<p>
  <b>Radio buttons: only one at a time may be selected.</b><br>
  <INPUT TYPE="radio" NAME="rb" VALUE="A" > Choice A<br>
  <INPUT TYPE="radio" NAME="rb" VALUE="B" checked> Choice B<BR>
  <INPUT TYPE="radio" NAME="rb" VALUE="C"> Choice C<P>
  <b>Drop-down menu: please select any one.</b><BR>
  <SELECT NAME="select1">
    <OPTION> Option 1
    <OPTION> Option 2
    <OPTION> Option 3
  </SELECT><P>
  <INPUT TYPE="text" NAME="text1" SIZE=30 VALUE="This is a small text field!">
  <P>
  <TEXTAREA NAME="text2" ROWS=10 COLS=30>
    This is a textarea. It can hold much more data than a text field and
    display it easily, including scrollbars. Pretty useful!
  </TEXTAREA><P>
  <INPUT TYPE="submit" VALUE="Submit" onClick="display()" >
  <INPUT TYPE="reset" VALUE="Original Settings" >
</FORM>
```

JavaScript code:

```
<Script>
function display() {
  var message="The following occurred:\n\n";
  if (document.forms[0].cb1.checked) {message += "Box #1 checked\n";}
  if (document.forms[0].cb2.checked) {message += "Box #2 checked\n";}
  message += "\n";
  if (document.forms[0].rb[0].checked) {message += "Choice A selected\n";}
  if (document.forms[0].rb[1].checked) {message += "Choice B selected\n";}
  if (document.forms[0].rb[2].checked) {message += "Choice C selected\n";}
  message += "\n";
  if (document.forms[0].select1[0].selected) {message += "Option 1 selected\n";}
  if (document.forms[0].select1[1].selected) {message += "Option 2 selected\n";}
  if (document.forms[0].select1[2].selected) {message += "Option 3 selected\n";}
  alert(message);
}
</Script>
```

Frames - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites Media Print Mail Stop

Address frames.html Go Links

Cell #1	Cell #2	Cell #3
Cell #4	Cell #5	
Cell #6		

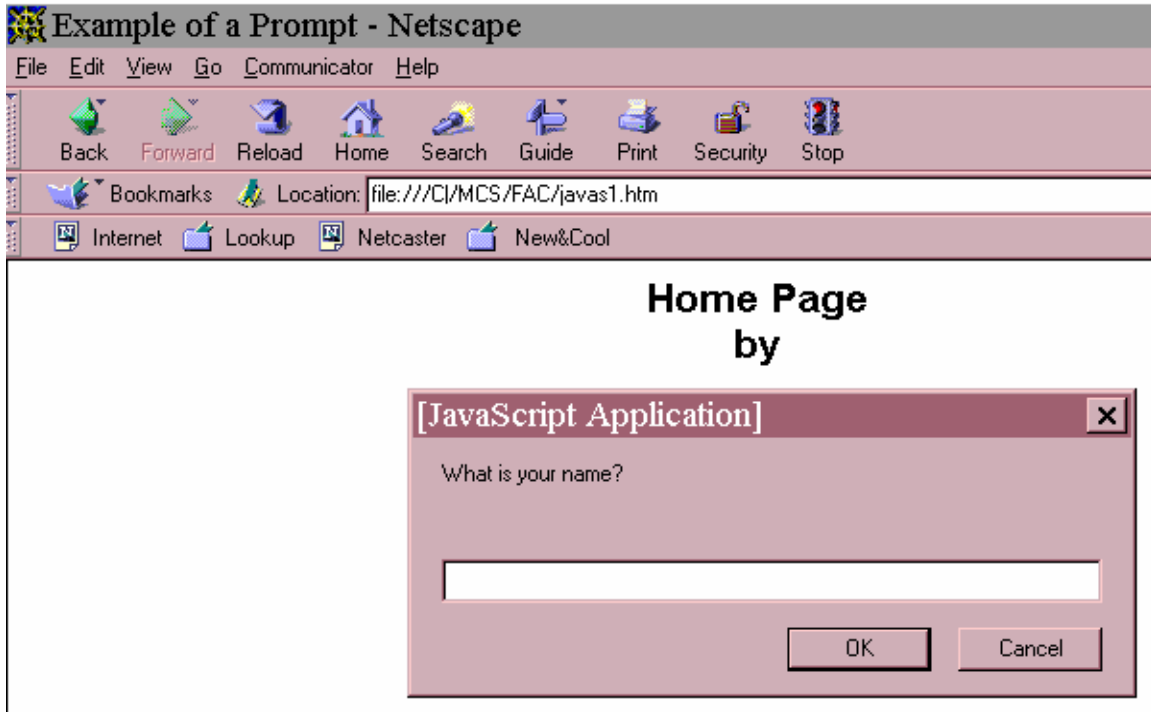
```
<html>
<head>
  <title>Frames</title>
</head>
<frameset rows="20%,70%,10%">
  <frameset cols="200,60%,40%">
    <frame src="cell1.html" noresize>
    <frame src="cell2.html" frameborder="no">
    <frame src="cell3.html" frameborder="no">
  </frameset>
  <frameset bordercolor="blue" cols="50%,50%">
    <frame bordercolor="blue" src="cell4.html">
    <frame src="cell5.html">
  </frameset>
  <frame src="cell6.html">
</frameset>
</html>
```

Done My Computer

start Microsoft FrontPage Frames - Microsoft In... Document1 - Microsof... Adobe Acrobat - [we... 12:33 PM

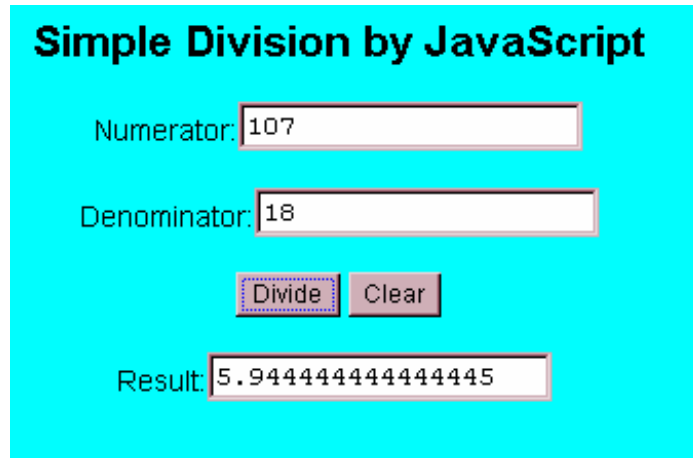
EXAMPLES OF JAVASCRIPT

[1] Name prompt that shows up on a page:



```
<HTML>
  <HEAD>
    <TITLE>Example of a Prompt</TITLE>
  </HEAD>
  <BODY>
    <CENTER><H2>Home Page<BR>by<BR>
    <SCRIPT LANGUAGE="JavaScript">
      <!-- Hide from old browsers
      document.write(prompt("What is your name?",""))
      //stop hiding-->
    </SCRIPT>
    <BR>CSC 101
  </BODY>
</HTML>
```

[2] MATHEMATICAL CALCULATION USING A FORM



```
<HTML>
<HEAD>
  <SCRIPT LANGUAGE="JavaScript">
    <!-- Hide from old browsers

    function form1(form) {
      a = form.a.value
      b = form.b.value
      c = eval(a)/eval(b)
      form.result1.value = c
      return c
    }

    //stop hiding-->
  </SCRIPT>
</HEAD>
<BODY>
  <CENTER>
    <H2>Simple Division by JavaScript</H2>
    <FORM METHOD="POST">
      Numerator:<INPUT TYPE="text" NAME="a"><P>
      Denominator:<INPUT TYPE="text" NAME="b"><P>
      <INPUT TYPE="button" VALUE="Divide" onClick="form1(this.form)">
      <INPUT TYPE="reset" VALUE="Clear"><P>
      Result:<INPUT TYPE="text" NAME="result1">
    </FORM>
  </CENTER>
</BODY>
</HTML>
```

[3] Use of a Mouse to change a picture:



```
<HTML>
  <HEAD>
    <TITLE>Use of a Mouse</TITLE>
    <SCRIPT LANGUAGE="JavaScript">
      <!-- Hide from old browsers
        var down = new Image (
          down.src = "surf.jpg"
        //stop hiding-->
      </SCRIPT>
  </HEAD>
  <BODY>
    <CENTER>
      <H2>Move your mouse over the following picture<BR>
      to change from a winter sport to a summer sport!<P>
      <A HREF="#" onmouseover="document.images[0].src = down.src"
        onmouseout="document.images[0].src='snow.jpg'">
      <IMG SRC="snow.jpg" BORDER=0 ALIGN="CENTER"></A><P>
      Which season is your favorite?</CENTER>
  </BODY>
</HTML>
```

Both pictures are on the N Drive. The other picture is:

