Widgets

////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////

1.Carousel

<!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>

<meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1" />

<title>Javascript gallery</title>

<link type="text/css" href="base.css" media="screen" rel="stylesheet" />

<script type="text/javascript" src="global.js"></script>

</head>

<body>

<div id="slideshow">

<div id="slideshow\_wrapper">

<ul id="slideshow\_set">

<li><img src="2.jpg" width="200" height="130" alt="Image 2" /></li>

<li><img src="3.jpg" width="200" height="130" alt="Image 3" /></li>

<li><img src="4.jpg" width="200" height="130" alt="Image 4" /></li>

<li><img src="5.jpg" width="200" height="130" alt="Image 5" /></li>

</ul>

</div>

</div>

</body>

</html>

7b, Global,js

function addLoadEvent(func) {

var oldonload = window.onload;

if (typeof window.onload != 'function') {

window.onload = func;

} else {

window.onload = function() {

oldonload();

func();

}

}

}

function moveSlideshow(elementID,final\_x,final\_y,interval) {

if (!document.getElementById) return false;

// if the element does not exist we have nothing to do

if (!document.getElementById(elementID)) return false;

var elem = document.getElementById(elementID);

// the slideshow events stack up and the animation is not smooth anymore

if (elem.movement) {

clearTimeout(elem.movement);

}

// current slideshow position

var xpos = parseInt(elem.style.left);

var ypos = parseInt(elem.style.top);

if (xpos == final\_x && ypos == final\_y) {

return true;

}

// restrict moving to white area

if (final\_x <= -elem.max\_x) {

final\_x = -elem.max\_x;

}

if (final\_x > 0) {

final\_x = 0;

}

// animation bit (taken from the book DOM Scripting by Jeremy Keith)

if (xpos < final\_x) {

var dist = Math.ceil((final\_x - xpos)/10);

xpos = xpos + dist;

}

if (xpos > final\_x) {

var dist = Math.ceil((xpos - final\_x)/10);

xpos = xpos - dist;

}

// again, restrict showing white area

if (xpos <= -elem.max\_x) {

xpos = -elem.max\_x;

}

if (xpos > 0) {

xpos = 0;

}

// fix the elements position

elem.style.left = xpos + "px";

elem.style.top = ypos + "px";

// and set up the event again after an interval

var repeat = "moveSlideshow('"+elementID+"',"+final\_x+","+final\_y+","+interval+")";

elem.movement = setTimeout(repeat,interval);

}

function prepareSlideshow() {

// first lets make sure the browser understands the DOM methods we will be using

if (!document.getElementsByTagName) return false;

if (!document.getElementById) return false;

// Make sure the elements exist

if (!document.getElementById("slideshow")) return false;

var slideshow = document.getElementById("slideshow");

var wrapper = document.getElementById("slideshow\_wrapper");

wrapper.style.overflow = "hidden";

// prepare the navigation bit we will be using

// left

var navigation = document.createElement("ul");

navigation.setAttribute("id", "navigation");

var li = document.createElement("li");

var scroll\_left = document.createElement("a");

scroll\_left.setAttribute("id", "scroll\_left");

scroll\_left.href ="#";

var text = document.createTextNode("Left");

scroll\_left.appendChild(text);

li.appendChild(scroll\_left);

navigation.appendChild(li);

slideshow.insertBefore(navigation, wrapper);

//right

var li = document.createElement("li");

var scroll\_right = document.createElement("a");

scroll\_right.setAttribute("id", "scroll\_right");

scroll\_right.href ="#";

var text = document.createTextNode("Right");

scroll\_right.appendChild(text);

li.appendChild(scroll\_right);

navigation.appendChild(li);

slideshow.insertBefore(navigation, wrapper);

var slideshow\_set = document.getElementById("slideshow\_set");

slideshow\_set.style.top = 0+"px";

slideshow\_set.style.left = 0+"px";

// to get the max y position of the gallery image track we need to count all

// the li items and multiply that number with 130

var li = slideshow\_set.getElementsByTagName("li");

slideshow\_set.max\_x = (li.length-1) \* 200;

slideshow\_set.max\_y = li.length \* 130;

// need the width of the gallery so that they do not scroll vertical

var width = li.length \* 200;

slideshow\_set.style.width = width + "px";

// Attach onmouseover event for left

scroll\_left.onclick = function() {

// get the current position of the gallery element

var slideshow\_set = document.getElementById("slideshow\_set");

var x = parseInt(slideshow\_set.style.left);

if (x % 200 == 0) {

moveSlideshow("slideshow\_set",x+200,0,10);

}

return false;

}

// Attach onmouseover event for right

scroll\_right.onclick = function() {

// get the current position of the gallery element

var slideshow\_set = document.getElementById("slideshow\_set");

var x = parseInt(slideshow\_set.style.left);

if (x % 200 == 0) {

moveSlideshow("slideshow\_set",x-200,0,10);

}

return false;

}

}

addLoadEvent(prepareSlideshow);

7c. base.css

\* {

margin: 0;

padding: 0;

}

li {

list-style: none;

}

#slideshow {

margin: 20px auto 0 auto;

width: 242px;

height: 140px;

background: #d5d5d5 url(slideshow\_bg.gif) repeat-x;

}

#slideshow\_wrapper {

/\* we use relative to catch the children \*/

position: relative;

overflow: scroll;

width: 200px;

height: 130px;

left: 21px;

top: 5px;

}

#slideshow\_set {

position: absolute;

}

#slideshow\_set li {

float: left;

height: 130px;

width: 200px;

}

img {

border: 0;

}

#navigation {

position: absolute;

z-index: 10;

}

#scroll\_left {

left: 0;

top: 0;

background: url(left.gif) no-repeat;

}

#scroll\_right {

left: 221px;

top: 0;

background: url(right.gif) no-repeat;

}

#scroll\_left, #scroll\_right {

position: absolute;

overflow: hidden;

display: block;

padding: 0 0 0 21px;

height: 140px;

width: 0px !important; /\* for most browsers \*/

width /\*\*/: 21px; /\* for IE5.5's bad box model \*/

}

2. Accordion

<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0 Transitional//EN">

<html>

<head>

<title>Collapsible Panels Ex 1</title>

<style type="text/css">

.dhtmlgoodies\_question {

overflow:hidden;

cursor:pointer;

}

.dhtmlgoodies\_answer {

visibility:hidden;

height:0px;

overflow:hidden;

position:relative;

}

.dhtmlgoodies\_answer\_content{

position:relative;

}

</style>

<script type="text/javascript">

var dhtmlgoodies\_slideSpeed = 10; // Higher value = faster

var dhtmlgoodies\_timer = 10; // Lower value = faster

var objectIdToSlideDown = false;

var dhtmlgoodies\_activeId = false;

var dhtmlgoodies\_slideInProgress = false;

function showHideContent(e,inputId)

{

if(dhtmlgoodies\_slideInProgress)return;

dhtmlgoodies\_slideInProgress = true;

if(!inputId)inputId = this.id;

inputId = inputId + '';

var numericId = inputId.replace(/[^0-9]/g,'');

var answerDiv = document.getElementById('dhtmlgoodies\_a' + numericId);

objectIdToSlideDown = false;

if(!answerDiv.style.display || answerDiv.style.display=='none'){

if(dhtmlgoodies\_activeId && dhtmlgoodies\_activeId!=numericId){

objectIdToSlideDown = numericId;

slideContent(dhtmlgoodies\_activeId,(dhtmlgoodies\_slideSpeed\*-1));

}else{

answerDiv.style.display='block';

answerDiv.style.visibility = 'visible';

slideContent(numericId,dhtmlgoodies\_slideSpeed);

}

}else{

slideContent(numericId,(dhtmlgoodies\_slideSpeed\*-1));

dhtmlgoodies\_activeId = false;

}

}

function slideContent(inputId,direction)

{

var obj =document.getElementById('dhtmlgoodies\_a' + inputId);

var contentObj = document.getElementById('dhtmlgoodies\_ac' + inputId);

height = obj.clientHeight;

if(height==0)height = obj.offsetHeight;

height = height + direction;

rerunFunction = true;

if(height>contentObj.offsetHeight){

height = contentObj.offsetHeight;

rerunFunction = false;

}

if(height<=1){

height = 1;

rerunFunction = false;

}

obj.style.height = height + 'px';

var topPos = height - contentObj.offsetHeight;

if(topPos>0)topPos=0;

contentObj.style.top = topPos + 'px';

if(rerunFunction){

setTimeout('slideContent(' + inputId + ',' + direction + ')',dhtmlgoodies\_timer);

}else{

if(height<=1){

obj.style.display='none';

if(objectIdToSlideDown && objectIdToSlideDown!=inputId){

document.getElementById('dhtmlgoodies\_a' + objectIdToSlideDown).style.display='block';

document.getElementById('dhtmlgoodies\_a' + objectIdToSlideDown).style.visibility='visible';

slideContent(objectIdToSlideDown,dhtmlgoodies\_slideSpeed);

}else{

dhtmlgoodies\_slideInProgress = false;

}

}else{

dhtmlgoodies\_activeId = inputId;

dhtmlgoodies\_slideInProgress = false;

}

}

}

function initShowHideDivs()

{

var divs = document.getElementsByTagName('DIV');

var divCounter = 1;

for(var no=0;no<divs.length;no++){

if(divs[no].className=='dhtmlgoodies\_question'){

divs[no].onclick = showHideContent;

divs[no].id = 'dhtmlgoodies\_q'+divCounter;

var answer = divs[no].nextSibling;

while(answer && answer.tagName!='DIV'){

answer = answer.nextSibling;

}

answer.id = 'dhtmlgoodies\_a'+divCounter;

contentDiv = answer.getElementsByTagName('DIV')[0];

contentDiv.style.top = 0 - contentDiv.offsetHeight + 'px';

contentDiv.className='dhtmlgoodies\_answer\_content';

contentDiv.id = 'dhtmlgoodies\_ac' + divCounter;

answer.style.display='none';

answer.style.height='1px';

divCounter++;

}

}

}

window.onload = initShowHideDivs;

</script>

</head>

<body>

<div class="dhtmlgoodies\_question">Q: What are the advantages of table less design?</div>

<div class="dhtmlgoodies\_answer">

<div>

Ohh! There are so many:

<ul>

<li>Faster loading pages</li>

<li>Smoother loading pages</li>

<li>Saved bandwidth</li>

<li>Separate layout and content</li>

<li>Easy to change layout</li>

<li>Increased accessibility</li>

<li>Different styling for different media(print, screen, pda)</li>

</ul>

</div>

</div>

</body>

</html>

3. Dynamic Animation

<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0 Transitional//EN">

<html>

<head>

<title>animation</title>

<SCRIPT LANGUAGE="JavaScript" type="text/javascript">

<!--

function openWindow(file) { popupWin = window.open(file, 'popup', 'status=0,menubar="no",resizable="yes",width=400,height=400'); }

//number will be given a value of

var number=6;

src = [];

for (y=number; y>0; y--) {

src[y-1] = y + ".jpg";

}

//set duration for each image

duration = 6;

ads=[]; ct=0;

function switchPic() {

var n=(ct+1)%src.length;

if (ads[n] && (ads[n].complete || ads[n].complete==null)) {

document["pic"].src = ads[ct=n].src;{

if (document.all)

pic.filters.blendTrans.apply();

pic.filters.blendTrans.play();}

}

ads[n=(ct+1)%src.length] = new Image;

ads[n].src = 'images/' + src[n];

setTimeout("switchPic()",duration\*1000);

}

function slide(){

if (document.images)

switchPic();

}

//-->

</SCRIPT>

</head>

<body onLoad="slide();">

<br /><br />

<div align="center">

<table cellspacing="0" cellpadding="0" border="0" align="center" width="360"><tr><td valign="middle"><img name="pic" src="images/1.jpg" width="360" height="130" border="0" style="filter:blendTrans(duration=4)" alt="where is this" /></td></tr></table>

</div>

<br />

</body>

</html>

4a. Ticker

<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0 Transitional//EN">

<html>

<head>

<title>Ticker</title>

<link rel="stylesheet" href="main2.css" type="text/css" media="all" />

<style>

h2.mainHeader{font-size:3.5em;padding:0px 0px 0px 5px;color:#000099; font-family:courier}

p.whiteFont{color:#ffffff}

</style>

</head>

<body>

<div id="ticker"><script language="javascript" type="text/javascript" src="feed3.js"></script></div>

</body>

</html>

4b.main2.css

.default{color:#ffffff;font-weight:900:}

.grey{color:#ff0000;}

.blue{color:#0000ff;}

green{color:#00ff00;}

.red{color:#ff0000;}

.mainHeader{font-size:3.5em;padding:0px 0px 7px 10px;color:#000099}

h2.mainHeader{font-size:3.5em;padding:0px 0px 0px 5px;color:#000099; font-family:courier}

td.gold{background-color:#ffcc33;}

a.linkWhite{color:#ffffff;text-decoration:yes;}

.gold{color:#ffcc33;}

.white{color:#ffffff;}

a.bodyNav{color:#000000;text-decoration:none;}

a.bodyNav:hover{color:#ffcc33;text-decoration:none;}

a.bodyNav2{color:#ffffff;text-decoration:none;}

a.bodyNav2:hover{color:#ffcc33;text-decoration:none;}

a.bodyNavRed{color:#ff0000;text-decoration:none;}

a.bodyNavRed:hover{color:#ffffff;text-decoration:none;}

a.red{color:#ff0000;text-decoration:none;font-weight:bold}

.didyouknow{color:#000099;font-weight:bold;}

.youknowtext{color:#666666;}

#ticker {background-color: #EE351C;width: 100%;margin-bottom: 1px;font-size: 120%;}

#tickerAnchor {padding-top: 4px;padding-left: 4px;padding-right: 4px;height: 19px;color: #ffcc33;font-weight:bold;}

/\* The star html hack will hide a rule from all browsers but IE \*/

\* html #tickerAnchor {height: 24px;}

#ticker H2 {font-size: 100%;display: inline;padding-right: 1em;color:#ffffff;}

4c. feed3.js

//Allow IE4 to work with us.

if(!document.getElementById && document.all){

document.getElementById = function(id) {return document.all[id];}

}

/\*ticker functions\*/

var theCharacterTimeout = 50;

var theStoryTimeout = 3000;

var theWidgetOne = "\_";

var theWidgetTwo = "-";

var theWidgetNone = "";

var theLeadString = "<h2>Codeunique provides consultancy in</h2>";

var theTips = new Array();

//update or add tips here, single quotes are OK

theTips[0] = "Web Programming, Web Design and Web Standards.";

theTips[1] = "eCommerce";

theTips[2] = "Internet and Interactive TV Broadcasting";

theTips[3] = "Telematics Systems and Services";

theTips[4] = "Web Hosting.";

theTips[5] = "JavaScript";

theTips[6] = "Cascading Stylesheets";

theTips[7] = "Document Object Model";

theTips[8] = "Data Binding";

theTips[9] = "XML and XSLT";

theTips[10] = "Java and JSP";

theTips[11] = "User Data and CGI Email. ";

theTips[12] = "PHP. ";

theTips[13] = "ORACLE.";

theTips[14] = "SQL/PL.";

theTips[15] = "Perl.";

theTips[16] = "C/C++ Programming.";

//end tips

var theItemCount = theTips.length;

if ((document.getElementById) && (document.body.innerHTML)) {

//write div for dhtml broswers to display tips

document.write("<div class='ticker' id='tickerAnchor'></div>");

}else{

//write div for non-dynamic browsers and display random tip

document.write("<div class='ticker'>" + theLeadString + theTips[Math.round(Math.random() \* (theTips.length -1))] + "</div>");

}

// Ticker startup

function startTicker()

{

// Define run time values

theCurrentStory = -1;

theCurrentLength = 0;

// Locate base objects

if (document.getElementById) {

theAnchorObject = document.getElementById("tickerAnchor");

runTheTicker();

}

}

// Ticker main run loop

function runTheTicker()

{

var myTimeout;

// Go for the next story data block

if(theCurrentLength == 0)

{

theCurrentStory++;

theCurrentStory = theCurrentStory % theItemCount;

theStorySummary = theTips[theCurrentStory].replace(/&quot;/g,'"');

thePrefix = "<span class=\"tickerLeadString\">" + theLeadString + "</span>";

}

// Stuff the current ticker text into the anchor

theAnchorObject.innerHTML = thePrefix +

theStorySummary.substring(0,theCurrentLength) + whatWidget();

// Modify the length for the substring and define the timer

if(theCurrentLength != theStorySummary.length)

{

theCurrentLength++;

myTimeout = theCharacterTimeout;

}

else

{

theCurrentLength = 0;

myTimeout = theStoryTimeout;

}

// Call up the next cycle of the ticker

setTimeout("runTheTicker()", myTimeout);

}

// Widget generator

function whatWidget()

{

if(theCurrentLength == theStorySummary.length)

{

return theWidgetNone;

}

if((theCurrentLength % 2) == 1)

{

return theWidgetOne;

}

else

{

return theWidgetTwo;

}

}

startTicker();

5. Calculatorr

<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0 Transitional//EN">

<html>

<head>

<title>Untitled</title>

</head>

<body>

<script language="JavaScript">

<!--

function pence(amount) {

// returns the amount in the .99 format

return (amount == Math.floor(amount)) ? amount + '.00' : ( (amount\*10 == Math.floor(amount\*10)) ? amount + '0' : amount);

}

function update(form) {

var subtotal = (form.quantity.value - 0) \* (form.unitcost.value - 0);

subtotal = Math.floor(subtotal \* 100)/100;

form.subtotal.value = '£' + pence(subtotal);

var tax = subtotal / 100 \* (form.rate.value - 0);

tax = Math.floor(tax \* 100)/100

form.tax.value = '£' + pence(tax);

total = subtotal + tax;

total = Math.floor(total \* 100)/100

form.total.value = '£' + pence(total);

}

//-->

</script>

<form>

<table>

<tr><td>Quantity: </td><td><input type=text name="quantity" SIZE="8"></td></tr>

<tr><td>Unit Cost: </td><td><input type=text name="unitcost" VALUE="19.99" SIZE="8"></td></tr>

<tr><td>Tax Rate (%): </td><td><input type=text name="rate" VALUE="17.5"SIZE="8"></td></tr>

<tr><td>Subtotal: </td><td><input type=text name="subtotal"SIZE="8"></td></tr>

<tr><td>Tax: </td><td><input type=text name="tax"SIZE="8"></td></tr>

<tr><td>Total: </td><td><input type=text name="total"SIZE="8"></td></tr>

<tr><td> </td><td><input type = button onClick="update(this.form)" value="Click Me"></td></tr>

</table>

</form>

</body>

</html>

5B. VAT calculator

<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0 Transitional//EN">

<html>

<head>

<title>Untitled</title>

</head>

<body>

<script language="JavaScript">

<!--

function pence(amount) {

// returns the amount in the .99 format

return (amount == Math.floor(amount)) ? amount + '.00' : ( (amount\*10 == Math.floor(amount\*10)) ? amount + '0' : amount);

}

function update(form) {

var subtotal = (form.quantity.value - 0) \* (form.unitcost.value - 0);

subtotal = Math.floor(subtotal \* 100)/100;

form.subtotal.value = '£' + pence(subtotal);

var tax = subtotal / 100 \* (form.rate.value - 0);

tax = Math.floor(tax \* 100)/100

form.tax.value = '£' + pence(tax);

total = subtotal + tax;

total = Math.floor(total \* 100)/100

form.total.value = '£' + pence(total);

}

//-->

</script>

<form>

<table>

<tr><td>Quantity: </td><td><input type="text" name="quantity" SIZE="8"></td></tr>

<tr><td>Unit Cost: </td><td><input type="text" name="unitcost" VALUE="19.99" SIZE="8"></td></tr>

<tr><td>Tax Rate (%): </td><td><input type="text" name="rate" VALUE="17.5" size="8"></td></tr>

<tr><td>Subtotal: </td><td><input type="text" name="subtotal"SIZE="8"></td></tr>

<tr><td>Tax: </td><td><Iinput type="text" name="tax"size="8"></td></tr>

<tr><td>Total: </td><td><input type="text" name="total"SIZE="8"></td></tr>

<tr><td> </td><td><input type="BUTTON" onClick="update(this.form)" value="Click Me"></td></tr>

</table>

</form>

</body>

</html>

6. Tooltip

<html>

<head>

<title>tooltip</title>

<meta name="description" content="blurb" />

<script language="JavaScript" type="text/javascript">

<!--

function resizeFix(){void 0}

function showElement(){void 0}

function hideElement(){void 0}

function positionElement(){void 0}

//-->

</script>

<script language="JavaScript1.1" src="tooltip.js" type="text/javascript">

</script>

<style type="text/css">

.tooltip-content-main {

top:40px;

left:70px;

min-height:80px;

border:2px solid #ffcc33;

/\*background: url('tooltipbottom.gif') no-repeat;\*/

}

.tooltip-content-common {

position:absolute;

visibility: hidden;

width: 233px;

}

.tooltip-content {

width:233px;

}

.tooltip-subcontent {

padding:10px 10px 0 10px;

width:233px;

opacity:1;

filter: alpha(opacity=1);

z-index:2;

line-height:1.5em;

color:#595959;

background-position:bottom left;

min-height:80px;

}

\* html .tooltip-subcontent {

opacity:100;

filter: alpha(opacity=100);

height:80px;

margin-right:15px;

}

</style>

</head>

<body>

<div style="margin:175px 0 0 0;"></div>

<div id="learning-zone-main">

<!-- Begin featured clip -->

<a href="#1" onmouseOut="hideElement('showme');"

onmouseOver="showElement('showme');"><img src="s\_biol\_ec\_00117\_4x3.jpg" width="146" height="82" alt="love this recipe" border="0" class="img-primary" /></a>

<!-- end featured clip -->

</div>

<div class="dataSpacer2">&nbsp;</div>

<!-- Begin tooltip content -->

<div id="showme" class="tooltip-content-main tooltip-content-common">

<div class="tooltip-content">

<p class="tooltip-subcontent"><span>Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Nulla tristique, nibh non imperdiet posuere, pede nulla cursus nunc, in nonummy nibh pede quis felis. </span></p>

</div>

</div>

<!-- end tooltip content -->

</body>

</html>

7. Preview checkboxes

<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0 Transitional//EN">

<html>

<head>

<title>jseh\_with\_Multi\_SwapMO39.html</title>

<script type="text/javascript" language="Javascript">

<!--

var str,str2,str3;

function checkboxes(n) {

if(n==0){

var str = '<img src="sydney.jpg" width="300" height="300" alt="sydney">';

var str2 = '';

var str3 = '';

}

if(n==1){

var str = '';

var str2 = '<img src="hong\_kong.jpg" width="300" height="300" alt="sydney">';

var str3 = '';

}

if(n==2){

var str = '';

var str2 = '';

var str3 = '<img src="venice.jpg" width="300" height="300" alt="sydney">';

}

with(document.getElementById){

textstring3.innerHTML = str;

textstring4.innerHTML = str2;

textstring5.innerHTML = str3;

}

}

//-->

</script>

</head>

<body>

<div><p><strong>Click to preview</strong></p></div>

<div>

<img src="sydney.jpg" width="100" height="50" alt="Sydney" border="0"> <img src="venice.jpg" width="100" height="50" alt="" border="0"> <img src="hong\_kong.jpg" width="100" height="50" alt="Accra" border="0">

</div>

<form name="f">

<input type="checkbox" name="textstring3" value="Sydney" onclick="checkboxes(0)">Sydney Sydney Opera House <input type="checkbox" name="textstring4" value="Venice" onclick="checkboxes(1)"> Venice Venice Port <input type="checkbox" name="textstring5" value="Venice" onclick="checkboxes(2)"> Hong Kong

<div>

<br />

<span id="textstring3"></span><span id="textstring4"></span><span id="textstring5"></span>

</div>

</form>

</body>

</html>

1 Generating Random Feeds & Galleries

The Math.random( ) *method* is used in the following example that is placed in the body section of an html document. The JavaScript displays an image, for an html *img tag* with a name attribute value of “pix”, that is determined by the code each time the page is loaded/reloaded and the script is executed.

Math.floor() – round a number down; Math.random() – return a random number

Ex 1 – Displaying an array of random images and image names.

<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0 Transitional//EN">

<html>

<head>

<title>generating random images</title>

</head>

<body>

<div align="center"><strong>this page tests random generation of images</strong></div>

<script language= “javascript” type ="text/javascript">

<!--

var pix= new Array("pic0.gif", "pic1.gif", "pic2.gif","pic3.gif","pic4.gif", "pic5.gif");

var rand= Math.floor(Math.random() \* 6);

document.write('<center>');

document.write('<img src="'+pix[rand]+'" /><br />');

document.write(rand + " : " + pix[rand] );

document.write('</center>');

//-->

</script>

</body>

</html>

Ex 2 Displaying an array of random images with corresponding captions

<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0 Transitional//EN">

<html>

<head>

<title>generating random images with corresponding captions</title>

</head>

<body>

<div align="center"><strong>this page tests random generation of images</strong></div>

<script language= "javascript" type ="text/javascript">

<!--

var pix1= new Array("1.jpg", "2.jpg", "3.jpg","4.jpg","5.jpg", "6.jpg");

var pix2= new Array("This is picture 1", "This is picture 2", "This is picture 3","This is picture 4","This is picture 5","This is picture 6");

var pix3= new Array("This is more comment for picture 1", "This is more comment for picture 2", "This is more comment for picture 3","This is more comment for picture 4","This is more comment for picture 5","This is more comment for picture 6");

var rand= Math.floor(Math.random() \* 6);

document.write('<center>');

document.write('<img src="'+pix1[rand]+'" /><br />');

document.write(pix2[rand]);

document.write('<br />' +pix3[rand]);

document.write('</center>');

//-->

</script>

</body>

</html>

Ex 3 Scrolling Gallery

<!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>

<meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1" />

<title>Javascript gallery</title>

<link type="text/css" href="base.css" media="screen" rel="stylesheet" />

<script type="text/javascript" src="global.js"></script>

</head>

<body>

<div id="slideshow">

<div id="slideshow\_wrapper">

<ul id="slideshow\_set">

<li><img src="2.jpg" width="200" height="130" alt="Image 2" /></li>

<li><img src="3.jpg" width="200" height="130" alt="Image 3" /></li>

<li><img src="4.jpg" width="200" height="130" alt="Image 4" /></li>

<li><img src="5.jpg" width="200" height="130" alt="Image 5" /></li>

</ul>

</div>

</div>

</body>

</html>

Associated files

i} global.js

function addLoadEvent(func) {

var oldonload = window.onload;

if (typeof window.onload != 'function') {

window.onload = func;

} else {

window.onload = function() {

oldonload();

func();

}

}

}

function moveSlideshow(elementID,final\_x,final\_y,interval) {

if (!document.getElementById) return false;

// if the element does not exist we have nothing to do

if (!document.getElementById(elementID)) return false;

var elem = document.getElementById(elementID);

// the slideshow events stack up and the animation is not smooth anymore

if (elem.movement) {

clearTimeout(elem.movement);

}

// current slideshow position

var xpos = parseInt(elem.style.left);

var ypos = parseInt(elem.style.top);

if (xpos == final\_x && ypos == final\_y) {

return true;

}

// restrict moving to white area

if (final\_x <= -elem.max\_x) {

final\_x = -elem.max\_x;

}

if (final\_x > 0) {

final\_x = 0;

}

// animation bit (taken from the book DOM Scripting by Jeremy Keith)

if (xpos < final\_x) {

var dist = Math.ceil((final\_x - xpos)/10);

xpos = xpos + dist;

}

if (xpos > final\_x) {

var dist = Math.ceil((xpos - final\_x)/10);

xpos = xpos - dist;

}

// again, restrict showing white area

if (xpos <= -elem.max\_x) {

xpos = -elem.max\_x;

}

if (xpos > 0) {

xpos = 0;

}

// fix the elements position

elem.style.left = xpos + "px";

elem.style.top = ypos + "px";

// and set up the event again after an interval

var repeat = "moveSlideshow('"+elementID+"',"+final\_x+","+final\_y+","+interval+")";

elem.movement = setTimeout(repeat,interval);

}

function prepareSlideshow() {

// first lets make sure the browser understands the DOM methods we will be using

if (!document.getElementsByTagName) return false;

if (!document.getElementById) return false;

// Make sure the elements exist

if (!document.getElementById("slideshow")) return false;

var slideshow = document.getElementById("slideshow");

var wrapper = document.getElementById("slideshow\_wrapper");

wrapper.style.overflow = "hidden";

// prepare the navigation bit we will be using

// left

var navigation = document.createElement("ul");

navigation.setAttribute("id", "navigation");

var li = document.createElement("li");

var scroll\_left = document.createElement("a");

scroll\_left.setAttribute("id", "scroll\_left");

scroll\_left.href ="#";

var text = document.createTextNode("Left");

scroll\_left.appendChild(text);

li.appendChild(scroll\_left);

navigation.appendChild(li);

slideshow.insertBefore(navigation, wrapper);

//right

var li = document.createElement("li");

var scroll\_right = document.createElement("a");

scroll\_right.setAttribute("id", "scroll\_right");

scroll\_right.href ="#";

var text = document.createTextNode("Right");

scroll\_right.appendChild(text);

li.appendChild(scroll\_right);

navigation.appendChild(li);

slideshow.insertBefore(navigation, wrapper);

var slideshow\_set = document.getElementById("slideshow\_set");

slideshow\_set.style.top = 0+"px";

slideshow\_set.style.left = 0+"px";

// to get the max y position of the gallery image track we need to count all

// the li items and multiply that number with 130

var li = slideshow\_set.getElementsByTagName("li");

slideshow\_set.max\_x = (li.length-1) \* 200;

slideshow\_set.max\_y = li.length \* 130;

// need the width of the gallery so that they do not scroll vertical

var width = li.length \* 200;

slideshow\_set.style.width = width + "px";

// Attach onmouseover event for left

scroll\_left.onclick = function() {

// get the current position of the gallery element

var slideshow\_set = document.getElementById("slideshow\_set");

var x = parseInt(slideshow\_set.style.left);

if (x % 200 == 0) {

moveSlideshow("slideshow\_set",x+200,0,10);

}

return false;

}

// Attach onmouseover event for right

scroll\_right.onclick = function() {

// get the current position of the gallery element

var slideshow\_set = document.getElementById("slideshow\_set");

var x = parseInt(slideshow\_set.style.left);

if (x % 200 == 0) {

moveSlideshow("slideshow\_set",x-200,0,10);

}

return false;

}

}

addLoadEvent(prepareSlideshow);

: i) base.css

\* {

margin: 0;

padding: 0;

}

li {

list-style: none;

}

#slideshow {

margin: 20px auto 0 auto;

width: 242px;

height: 140px;

background: #d5d5d5 url(slideshow\_bg.gif) repeat-x;

}

#slideshow\_wrapper {

/\* we use relative to catch the children \*/

position: relative;

overflow: scroll;

width: 200px;

height: 130px;

left: 21px;

top: 5px;

}

#slideshow\_set {

position: absolute;

}

#slideshow\_set li {

float: left;

height: 130px;

width: 200px;

}

img {

border: 0;

}

#navigation {

position: absolute;

z-index: 10;

}

#scroll\_left {

left: 0;

top: 0;

background: url(left.gif) no-repeat;

}

#scroll\_right {

left: 221px;

top: 0;

background: url(right.gif) no-repeat;

}

#scroll\_left, #scroll\_right {

position: absolute;

overflow: hidden;

display: block;

padding: 0 0 0 21px;

height: 140px;

width: 0px !important; /\* for most browsers \*/

width /\*\*/: 21px; /\* for IE5.5's bad box model \*/

1. **Image Rollovers**

If an image has been given a name in the html code by assigning a name attribute within the <img> tag, it may also, be addressed by this name in JavaScript. The syntax for this is document.images.imagename so that an image named “click” is addressed document.images.click

Assigning a new value to the “src” property of an image at runtime causes the browser to replace the image in the page. This is typically seen in rollovers. When the user places the cursor on an image it is replaced by a second image and when the cursor moves out of the zone the original image is returned.

The html <img> tag must be *surrounded by an anchor tag* to include calls to a JavaScript swapping function whenever the *onmouseover*  or *onmouseout*  event occur as seen in the example below.

It is required that all images used by the function must have same sizes.

Image Preload Routine

Rollover images in web pages use JavaScript effect to swap the original image as explained previously when the user places the cursor over the image.

In order that this can be effected smoothly without download delays, the required replacement image must be already loaded into the browser cache before it is called by the program. The way to do this is to use the JavaScript pre-load routine that forces the browser to download the image by creating new I mage() objects that use the swap images as their source.

In the example below for each element in the ”pics” array the “for” loop creates a corresponding element in the preload array. Each of the preload elements is made into an Image() object, then the image urls are assigned to their src property so that the browser will download the image files.

Ex 4 Mouse Event

<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0 Transitional//EN">

<html>

<head>

<title>roll over</title>

<script type="text/javascript" language="javascript">

<!--

var pics = new Array("promo\_dirtmusic.jpg","promo\_familymatters.jpg");

var preload = new Array();

for(var i=0;i < pics.length;i++) {

preload[i] = new Image();

preload[i].src = pics[i];

}

function swap(n) {

if( n == 0 ) document.images.click.src="promo\_dirtmusic.jpg";

if( n == 1 ) document.images.click.src="promo\_familymatters.jpg";

}

//-->

</script>

</head>

<body>

<br /><br />

<div align ="center">

<br /><br />A second popup window opens<br /><br />

<a href="jscookie32.html"

onmouseover="swap(1)" onmouseout="swap(0)">

<img name="click" src="promo\_dirtmusic.jpg" width = "110" height = "90" border = "0" alt="#">

</a>

</div>

</body>

</html>

1. **Using Server date**

The window.document.lastModified object can provide date and time information of when a page was last updated. This is normally supplied to the object above from the http file header sent by the web server. In certain instances where the web server omits this information a return value of 0 is passed to the object. This information is normally displayed at the bottom of a page in small fonts.

The example below first tests that a date has been supplied to the document.lastModified, then writes the data into the html document:

Ex 5 Using Server Date

<html>

<head>

<title>date modification</title>

</head>

<body>

<div align="center">This code is normally put at the bottom of a page. Scroll if you can't see.</div>

<br />

<script type="text/javascript">

<!--

if (Date.parse(document.lastModified) !=0 )

document.write('<center>') ;

document.write("Page last updated: " + document.lastModified);

document.write('</center>')

//-->

</script>

</body>

</html>

1. **Collapsible Panels (Hide and Show)**

Ex 6 Hide and Show

<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0 Transitional//EN">

<html>

<head>

<title>Hide and Show 1</title>

<style type="text/css">

.dhtmlgoodies\_question {

overflow:hidden;

cursor:pointer;

}

.dhtmlgoodies\_answer {

visibility:hidden;

height:0px;

overflow:hidden;

position:relative;

}

.dhtmlgoodies\_answer\_content{

position:relative;

}

</style>

<script type="text/javascript">

var dhtmlgoodies\_slideSpeed = 10; // Higher value = faster

var dhtmlgoodies\_timer = 10; // Lower value = faster

var objectIdToSlideDown = false;

var dhtmlgoodies\_activeId = false;

var dhtmlgoodies\_slideInProgress = false;

function showHideContent(e,inputId)

{

if(dhtmlgoodies\_slideInProgress)return;

dhtmlgoodies\_slideInProgress = true;

if(!inputId)inputId = this.id;

inputId = inputId + '';

var numericId = inputId.replace(/[^0-9]/g,'');

var answerDiv = document.getElementById('dhtmlgoodies\_a' + numericId);

objectIdToSlideDown = false;

if(!answerDiv.style.display || answerDiv.style.display=='none'){

if(dhtmlgoodies\_activeId && dhtmlgoodies\_activeId!=numericId){

objectIdToSlideDown = numericId;

slideContent(dhtmlgoodies\_activeId,(dhtmlgoodies\_slideSpeed\*-1));

}else{

answerDiv.style.display='block';

answerDiv.style.visibility = 'visible';

slideContent(numericId,dhtmlgoodies\_slideSpeed);

}

}else{

slideContent(numericId,(dhtmlgoodies\_slideSpeed\*-1));

dhtmlgoodies\_activeId = false;

}

}

function slideContent(inputId,direction)

{

var obj =document.getElementById('dhtmlgoodies\_a' + inputId);

var contentObj = document.getElementById('dhtmlgoodies\_ac' + inputId);

height = obj.clientHeight;

if(height==0)height = obj.offsetHeight;

height = height + direction;

rerunFunction = true;

if(height>contentObj.offsetHeight){

height = contentObj.offsetHeight;

rerunFunction = false;

}

if(height<=1){

height = 1;

rerunFunction = false;

}

obj.style.height = height + 'px';

var topPos = height - contentObj.offsetHeight;

if(topPos>0)topPos=0;

contentObj.style.top = topPos + 'px';

if(rerunFunction){

setTimeout('slideContent(' + inputId + ',' + direction + ')',dhtmlgoodies\_timer);

}else{

if(height<=1){

obj.style.display='none';

if(objectIdToSlideDown && objectIdToSlideDown!=inputId){

document.getElementById('dhtmlgoodies\_a' + objectIdToSlideDown).style.display='block';

document.getElementById('dhtmlgoodies\_a' + objectIdToSlideDown).style.visibility='visible';

slideContent(objectIdToSlideDown,dhtmlgoodies\_slideSpeed);

}else{

dhtmlgoodies\_slideInProgress = false;

}

}else{

dhtmlgoodies\_activeId = inputId;

dhtmlgoodies\_slideInProgress = false;

}

}

}

function initShowHideDivs()

{

var divs = document.getElementsByTagName('DIV');

var divCounter = 1;

for(var no=0;no<divs.length;no++){

if(divs[no].className=='dhtmlgoodies\_question'){

divs[no].onclick = showHideContent;

divs[no].id = 'dhtmlgoodies\_q'+divCounter;

var answer = divs[no].nextSibling;

while(answer && answer.tagName!='DIV'){

answer = answer.nextSibling;

}

answer.id = 'dhtmlgoodies\_a'+divCounter;

contentDiv = answer.getElementsByTagName('DIV')[0];

contentDiv.style.top = 0 - contentDiv.offsetHeight + 'px';

contentDiv.className='dhtmlgoodies\_answer\_content';

contentDiv.id = 'dhtmlgoodies\_ac' + divCounter;

answer.style.display='none';

answer.style.height='1px';

divCounter++;

}

}

}

window.onload = initShowHideDivs;

</script>

</head>

<body>

<div class="dhtmlgoodies\_question">Q: What are the advantages of table less design?</div>

<div class="dhtmlgoodies\_answer">

<div>

Ohh! There are so many:

<ul>

<li>Faster loading pages</li>

<li>Smoother loading pages</li>

<li>Saved bandwidth</li>

<li>Separate layout and content</li>

<li>Easy to change layout</li>

<li>Increased accessibility</li>

<li>Different styling for different media(print, screen, pda)</li>

</ul>

</div>

</div>

</body>

</html>

Ex 7 Hide and Show

<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0 Transitional//EN">

<html>

<head>

<title>Hide and Show 2</title>

<link rel="stylesheet" href="main.css" type="text/css"/>

<script type="text/javascript" language="javascript" src="main.js"></script>

</head>

<body>

<div class="dhtmlgoodies\_question">Q: What are the advantages of table less design?</div>

<div class="dhtmlgoodies\_answer">

<div>

Ohh! There are so many:

<ul>

<li>Faster loading pages</li>

<li>Smoother loading pages</li>

<li>Saved bandwidth</li>

<li>Separate layout and content</li>

<li>Easy to change layout</li>

<li>Increased accessibility</li>

<li>Different styling for different media(print, screen, pda)</li>

</ul>

</div>

</div>

<div class="dhtmlgoodies\_question">Q: What is the difference between the div and span tag ?</div>

<div class="dhtmlgoodies\_answer">

<div>

DIV is a block element while SPAN is an inline element. What's common to them both is that none of them have any default styling.

</div>

</div>

<div class="dhtmlgoodies\_question">Q: What kind of site is dhtmlgoodies.com ?</div>

<div class="dhtmlgoodies\_answer">

<div>

dhtmlgoodies.com is a private site developed and maintained by Alf Magne Kalleland. Here, you will find a lot of

DHTML scripts you can use freely to enhance your website.

</div>

</div>

</body>

</html>

1. CSS

body{

font-family: Trebuchet MS, Lucida Sans Unicode, Arial, sans-serif; /\* Font to use \*/

margin:0px;

}

.dhtmlgoodies\_question{ /\* Styling question \*/

/\* Start layout CSS \*/

color:#FFF;

font-size:0.9em;

background-color:#317082;

width:430px;

margin-bottom:2px;

margin-top:2px;

padding-left:2px;

/\*background-image:url('images/bg\_answer.gif');\*/

background-repeat:no-repeat;

background-position:top right;

height:20px;

/\* End layout CSS \*/

overflow:hidden;

cursor:pointer;

}

.dhtmlgoodies\_answer{ /\* Parent box of slide down content \*/

/\* Start layout CSS \*/

border:1px solid #317082;

background-color:#E2EBED;

width:400px;

/\* End layout CSS \*/

visibility:hidden;

height:0px;

overflow:hidden;

position:relative;

}

.dhtmlgoodies\_answer\_content{ /\* Content that is slided down \*/

padding:1px;

font-size:0.9em;

position:relative;

}

1. JavaScript

var dhtmlgoodies\_slideSpeed = 10; // Higher value = faster

var dhtmlgoodies\_timer = 10; // Lower value = faster

var objectIdToSlideDown = false;

var dhtmlgoodies\_activeId = false;

var dhtmlgoodies\_slideInProgress = false;

function showHideContent(e,inputId)

{

if(dhtmlgoodies\_slideInProgress)return;

dhtmlgoodies\_slideInProgress = true;

if(!inputId)inputId = this.id;

inputId = inputId + '';

var numericId = inputId.replace(/[^0-9]/g,'');

var answerDiv = document.getElementById('dhtmlgoodies\_a' + numericId);

objectIdToSlideDown = false;

if(!answerDiv.style.display || answerDiv.style.display=='none'){

if(dhtmlgoodies\_activeId && dhtmlgoodies\_activeId!=numericId){

objectIdToSlideDown = numericId;

slideContent(dhtmlgoodies\_activeId,(dhtmlgoodies\_slideSpeed\*-1));

}else{

answerDiv.style.display='block';

answerDiv.style.visibility = 'visible';

slideContent(numericId,dhtmlgoodies\_slideSpeed);

}

}else{

slideContent(numericId,(dhtmlgoodies\_slideSpeed\*-1));

dhtmlgoodies\_activeId = false;

}

}

function slideContent(inputId,direction)

{

var obj =document.getElementById('dhtmlgoodies\_a' + inputId);

var contentObj = document.getElementById('dhtmlgoodies\_ac' + inputId);

height = obj.clientHeight;

if(height==0)height = obj.offsetHeight;

height = height + direction;

rerunFunction = true;

if(height>contentObj.offsetHeight){

height = contentObj.offsetHeight;

rerunFunction = false;

}

if(height<=1){

height = 1;

rerunFunction = false;

}

obj.style.height = height + 'px';

var topPos = height - contentObj.offsetHeight;

if(topPos>0)topPos=0;

contentObj.style.top = topPos + 'px';

if(rerunFunction){

setTimeout('slideContent(' + inputId + ',' + direction + ')',dhtmlgoodies\_timer);

}else{

if(height<=1){

obj.style.display='none';

if(objectIdToSlideDown && objectIdToSlideDown!=inputId){

document.getElementById('dhtmlgoodies\_a' + objectIdToSlideDown).style.display='block';

document.getElementById('dhtmlgoodies\_a' + objectIdToSlideDown).style.visibility='visible';

slideContent(objectIdToSlideDown,dhtmlgoodies\_slideSpeed);

}else{

dhtmlgoodies\_slideInProgress = false;

}

}else{

dhtmlgoodies\_activeId = inputId;

dhtmlgoodies\_slideInProgress = false;

}

}

}

function initShowHideDivs()

{

var divs = document.getElementsByTagName('DIV');

var divCounter = 1;

for(var no=0;no<divs.length;no++){

if(divs[no].className=='dhtmlgoodies\_question'){

divs[no].onclick = showHideContent;

divs[no].id = 'dhtmlgoodies\_q'+divCounter;

var answer = divs[no].nextSibling;

while(answer && answer.tagName!='DIV'){

answer = answer.nextSibling;

}

answer.id = 'dhtmlgoodies\_a'+divCounter;

contentDiv = answer.getElementsByTagName('DIV')[0];

contentDiv.style.top = 0 - contentDiv.offsetHeight + 'px';

contentDiv.className='dhtmlgoodies\_answer\_content';

contentDiv.id = 'dhtmlgoodies\_ac' + divCounter;

answer.style.display='none';

answer.style.height='1px';

divCounter++;

}

}

}

window.onload = initShowHideDivs;

1. **Tool tip**

Ex11. Tooltip 1

<html>

<head>

<title>tooltip</title>

<meta name="description" content="blurb" />

<script language="JavaScript" type="text/javascript">

<!--

function resizeFix(){void 0}

function showElement(){void 0}

function hideElement(){void 0}

function positionElement(){void 0}

//-->

</script>

<script language="JavaScript1.1" src="tooltip.js" type="text/javascript">

</script>

<style type="text/css">

.tooltip-content-main {

top:40px;

left:70px;

min-height:80px;

border:2px solid #ffcc33;

/\*background: url('tooltipbottom.gif') no-repeat;\*/

}

.tooltip-content-common {

position:absolute;

visibility: hidden;

width: 233px;

}

.tooltip-content {

width:233px;

}

.tooltip-subcontent {

padding:10px 10px 0 10px;

width:233px;

opacity:1;

filter: alpha(opacity=1);

z-index:2;

line-height:1.5em;

color:#595959;

background-position:bottom left;

min-height:80px;

}

\* html .tooltip-subcontent {

opacity:100;

filter: alpha(opacity=100);

height:80px;

margin-right:15px;

}

</style>

</head>

<body>

<div style="margin:175px 0 0 0;"></div>

<div id="learning-zone-main">

<!-- Begin featured clip -->

<a href="#1" onmouseOut="hideElement('showme');"

onmouseOver="showElement('showme');"><img src="s\_biol\_ec\_00117\_4x3.jpg" width="146" height="82" alt="Egypt" border="0" class="img-primary" /></a>

<!-- end featured clip -->

</div>

<div class="dataSpacer2">&nbsp;</div>

<!-- Begin tooltip content -->

<div id="showme" class="tooltip-content-main tooltip-content-common">

<div class="tooltip-content">

<p class="tooltip-subcontent"><span>Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Nulla tristique, nibh non imperdiet posuere, pede nulla cursus nunc, in nonummy nibh pede quis felis. </span></p>

</div>

</div>

<!-- end tooltip content -->

</body>

</html>

Ex12

tooltip.js

// Alexander Adu-Sarkodie - May 2008

//Read comment

// set DHTML to true if Browser supports it

var DHTML = (document.layers || document.all || (parseInt(navigator.appVersion) >= 5)) ? true : false;

// set DOM to TRUE if we can use a W3C DOM model .

var DOM = (parseInt(navigator.appVersion) >= 5 || navigator.appVersion.indexOf("MSIE 5") != -1) ? true : false;

var dhtmlPrefix = "";

var styleSuffix = "";

// how to manipulate a dhtml element

dhtmlPrefix = document.layers ? "document.layers[" : "document.all[";

dhtmlPrefix = DOM ? "document.getElementById(" : dhtmlPrefix;

styleSuffix = document.layers ? "]" : "].style";

styleSuffix = DOM ? ").style" : styleSuffix;

dhtmlpagePosX = document.layers ? ".pageX" : ".left";

dhtmlpagePosY = document.layers ? ".pageY" : ".top";

dhtmlrelativePosX = document.layers ? ".left" : ".left";

dhtmlrelativePosY = document.layers ? ".top" : ".top";

var hideValue = document.layers ? "hide" : "hidden";

var showValue = document.layers ? "show" : "visible";

function showElement(element){

if (DHTML){

eval("styleObj = " + dhtmlPrefix + "element" + styleSuffix);

styleObj.visibility = showValue;

//setTimeout(element,450)

}

}

function hideElement(element){

if (DHTML){

eval("styleObj = " + dhtmlPrefix + "element" + styleSuffix);

styleObj.visibility = hideValue;

}

}

function positionElement( element, Xpos , Ypos ){

if (DHTML){

eval("styleObj = " + dhtmlPrefix + "element" + styleSuffix + dhtmlpagePosX + "=" + Xpos);

eval("styleObj = " + dhtmlPrefix + "element" + styleSuffix + dhtmlpagePosY + "=" + Ypos);

}

}

function NEWpositionElement( element, Xpos , Ypos , relative ){

if (DHTML){

var relative = (relative == true || relative == "relative") ? true : false ;

if (relative && relative == true){

//eval("styleObj = " + dhtmlPrefix + "element" + styleSuffix + "position=relative");

eval("styleObj = " + dhtmlPrefix + "element" + styleSuffix + dhtmlrelativePosX + "=" + Xpos);

eval("styleObj = " + dhtmlPrefix + "element" + styleSuffix + dhtmlrelativePosX + "=" + Xpos);

} else {

eval("styleObj = " + dhtmlPrefix + "element" + styleSuffix + dhtmlpagePosX + "=" + Xpos);

eval("styleObj = " + dhtmlPrefix + "element" + styleSuffix + dhtmlpagePosY + "=" + Ypos);

}

}

}

1. **Calculator:**

Ex13. Calculating with VAT

<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0 Transitional//EN">

<html>

<head><title>Calculator</title></head>

<body>

<script language="JavaScript">

<!--

function pence(amount) {

// returns the amount in the .99 format

return (amount == Math.floor(amount)) ? amount + '.00' : ( (amount\*10 == Math.floor(amount\*10)) ? amount + '0' : amount);

}

function update(form) {

var subtotal = (form.quantity.value - 0) \* (form.unitcost.value - 0);

subtotal = Math.floor(subtotal \* 100)/100;

form.subtotal.value = '£' + pence(subtotal);

var tax = subtotal / 100 \* (form.rate.value - 0);

tax = Math.floor(tax \* 100)/100

form.tax.value = '£' + pence(tax);

total = subtotal + tax;

total = Math.floor(total \* 100)/100

form.total.value = '£' + pence(total);

}

//-->

</script>

<form>

<table>

<tr><td>Quantity: </td><td><input type="text" name="quantity" size="8"></td></tr>

<tr><td>Unit Cost: </td><td>< input type="text" name ="unitcost" value="19.99" SIZE="8"></td></tr>

<tr><td>Tax Rate (%): </td><td>< input type="text" name ="rate" value="17.5"SIZE="8"></td></tr>

<tr><td>Subtotal: </td><td>< input type="text" name ="subtotal"SIZE="8"></td></tr>

<tr><td>Tax: </td><td>< input type="text" name ="tax" size="8"></td></tr>

<tr><td>Total: </td><td>< input type="text" name ="total" size="8"></td></tr>

<tr><td> </td><td><input type="button" onClick="update(this.form)" value="Click Me"></td></tr>

</table>

</form>

</body>

</html>

1. **DOM**

Document Object Model is a self describing concept and methodology for analysing and accessing the structure of web document. We have already had some insight into DOM when writing forms validation code. We will look further detail into DOM operations and manipulations. It provides an object Model, and alongside it an API for a document. In the web content, this refers to an HTML document as previously spoken of.

One of the best ways to visualize DOM for a webpage is to use the DOM Inspector that comes with Mozilla browsers

Within the Document Object Model, all page elements are placed in a tree like huierarachy. Every HTML tag is a node within this tree, with sub nodes and parent nodes. Also every text portion is its own DOM node.

The DOM API support methods to not only accesss elements in the DOM tree, but also add and remove elements. Therefore it is possible to modify virtually anything on the page.

Ex 14 Accessing tags

<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0 Transitional//EN">

<html>

<head>

<title>dom 1 - Accessing tags</title>

<script language="JavaScript" type="text/javascript">

window.onload = function () {

window.alert(document.getElementsByTagName("p").length + "p elements");

}

</script>

</head>

<body>

<p>The following code just accesses all p elements and counts them</p>

<p>JavaScript is great</p>

<p>I love it</p>

</body>

</html>

Ex 15 Removing Elements

<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0 Transitional//EN">

<html>

<head>

<title>DOM 3 - Removing elements</title>

<script language="JavaScript" type="text/javascript">

function removeItem() {

var list = document.getElementById("list");

if(list.childNodes.length > 0) {

list.removeChild(list.lastChild)

}

}

</script>

</head>

<body>

<div>The removeChild method that every node has can be used to eliminate a node from the DOM tree. Note you will have to call this method from the parent element of the node and provide the node a parameter.

<br />

<br />

The code in this example shows a list and removes the last item each time the button is clicked.

</div>

<br /><br />

<ol id="list">

<li>item i</li>

<li>item 2</li>

<li>item 3</li>

<li>item 4</li>

</ol>

<form><input type="button" name="btn" value="click to remove item" onclick="removeItem()"></form>

</body>

</html>

Ex 16 DOM - Adding elements

<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0 Transitional//EN">

<html>

<head>

<title>DOM 3 - Removing elements</title>

<script language="JavaScript" type="text/javascript">

initAddItem: function addItem() {

var list = document.getElementById("list");

var newNode = document.createElement("li");

var newTextNode = document.createTextNode("Hey, appended this text to the dynamically created list. Isn't this great! I love DOM");

newNode.appendChild(newTextNode);

list.appendChild(newNode);

list.insertBefore(newNode,list.firstChild);

}

window.onload=addItem;

</script>

</head>

<body>

<ul id="list">

<li>item</li>

</ul>

<!-- <form><input type="button" name="btn" value="click to add item" onclick="addItem()"></form> -->

</body>

</html>

Ex 17 Dynamic Styled created table from JavaScript Data

<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0 Transitional//EN">

<html>

<head>

<title>Styled created table from JavaScript Data - 2</title>

<script language="JavaScript" type="text/javascript">

//Author : Alexander Adu-Sarkodie

//To be used with above instruction ONLY

function createTable(data) {

var table = document.createElement("table");

table.style.border = "1px solid #ffcc33";

var thead = document.createElement("thead");

thead.style.padding = "5px";

var tr = document.createElement("tr");

for (var i = 0; i < data[0].length; i++) {

var th = document.createElement("th");

th.style.border = "2px solid #ff0000";

var newText = document.createTextNode(data[0][i]);

th.appendChild(newText);

tr.appendChild(th);

}

thead.appendChild(tr);

table.appendChild(thead);

var tbody = document.createElement("tbody");

for (var i =1; i < data.length; i++){

var tr = document.createElement("tr");

for (var j = 0; j < data[i].length; j++) {

var td = document.createElement("td");

td.style.padding = "5px";

td.style.border = "2px solid #00ff00";

var newText = document.createTextNode(data[i][j]);

td.appendChild(newText);

tr.appendChild(td);

}

tbody.appendChild(tr);

}

table.appendChild(tbody);

return table;

}

window.onload = function() {

var table = createTable ([

["1","2","3","4"],

["One","Two","Three","Four"],

["Un","Deux","Trois","Quatre"],

["eins","zwet","dret","vier"]

]);

document.body.appendChild(table)

}

</script>

</head>

<body>

</body>

</html>

Ex 18 Changing complete HTML Fragments

<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0 Transitional//EN">

<html>

<head>

<title>innerHtml -changing complete HTML Fragments </title>

<script language="JavaScript" type="text/javascript">

var nr = 1;

function addItem() {

var list = document .getElementById("list");

nr++;

var newNode = "<li>item" + nr + "</li>";

list.innerHTML += newNode;

}

</script>

</head>

<body onload="addItem();">

<ul id="list">

<li>item 1</li>

</ul>

</body>

</html>

1. **AJAX**

Ajax is all about using XMLHttpRequest (XHR) to send HTTP requests to the web server. The request must be in the same domain as the script for security reasons. JavaScript is used to evaluate and display the data on the client.

The basis of all AJAX applications is the mentioned XMLHttpRequest object. All AJAX enbled browsers support it natively, but in Internet Explorer the ActiveX object is required except IE7. In all cases it is best to create the object using try and catch to instantiate the native object first.

XMLHttpRequest States

State Description

0 Un-initialised

1 Loading

2 Loaded

3 Waiting

4 Complete

Ex 19 Creating an HTTP Request

<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0 Transitional//EN">

<html>

<head>

<title>Creating an http request</title>

<script language="JavaScript" type="text/javascript">

function getXMLHttp() {

var XMLHttp = null;

if (window.XMLHttpRequest) {

try {

XMLHttp = new XMLHttpRequest()

}

catch (e){}

}

else if (window.ActiveXObject) {

try {

XMLHttp = new ActiveXObject("Msxml2.XMLHTTP");

}

catch(e) {

try {

XMLHttp = new ActiveXObject(Microsoft.XMLHttp);

}

catch (e) {}

}

}

return XMLHttp;

}

</script>

</head>

<body>

</body>

</html>

Ex 20 Creating an HTTP Get Request

<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0 Transitional//EN">

<html>

<head>

<title>get HTTP Request</title>

<script language="JavaScript" type="text/javascript">

var XMLHttp = getXMLHttp();

XMLHttp.open ("GET","phrasebook.txt");

XMLHttp.onreadystatechange = handlerFunction;

XMLHttp.send(null);

function handlerFunction() {

if(XML.readyState==4) {

window.alert("Returned data" : + XMLHttp.responseText);

}

}

</script>

</head>

<body>

</body>

</html>

20b.

**Quick tip: XMLHttpRequest and innerHTML**

XMLHttpRequest is one of modern DHTML’s best kept secrets. If you haven’t encountered it before, it’s a method of making an HTTP call back to the hosting web server without refreshing the whole page - a kind of [remote scripting](http://www.ashleyit.com/rs/) on steroids. Originally a Microsoft extension, it’s been adapted by both the Mozilla browser family and ([as of version 1.2](http://developer.apple.com/internet/webcontent/xmlhttpreq.html)) Safari. The Sarissa library [discussed previously](http://www.sitepoint.com/blog-post-view.php?id=181637) offers an abstraction layer for the different browsers, or for a more lightweight approach this [code from jibbering.com](http://jibbering.com/2002/4/httprequest.html) (which makes use of IE’s [JScript conditional compilation](http://msdn.microsoft.com/library/en-us/script56/html/js56jsconconditionalcompilation.asp)) works perfectly.

Getting the most out of XMLHttpRequest generally involves using server-side generated XML, which can be retrieved by your JavaScript application, parsed and used in more complex logic. However, for a quick fix the following code will load an HTML fragment from a URL and insert it directly in to a page:

|  |
| --- |
| function loadFragmentInToElement(fragment\_url, element\_id) { |
| var element = document.getElementById(element\_id); |
| element.innerHTML = '<p><em>Loading ...</em></p>'; |
| xmlhttp.open("GET", fragment\_url); |
| xmlhttp.onreadystatechange = function() { |
| if (xmlhttp.readyState == 4 && xmlhttp.status == 200) { |
| element.innerHTML = xmlhttp.responseText; |
| } |
| } |
| xmlhttp.send(null); |
| } |

function loadFragmentInToElement(fragment\_url, element\_id) {

var element = document.getElementById(element\_id);

element.innerHTML = '<p><em>Loading ...</em></p>';

xmlhttp.open("GET", fragment\_url);

xmlhttp.onreadystatechange = function() {

if (xmlhttp.readyState == 4 && xmlhttp.status == 200) {

element.innerHTML = xmlhttp.responseText;

}

}

xmlhttp.send(null);

}

Call the above function with the URL of the HTML fragment to be inserted and the ID of the element in which it should appear. It relies on the jibbering.com code to set up the xmlhttp variable.

It’s definitely quick and dirty, but it’s also a great quick demonstration of the power of the XMLHttpRequest extension.

1. Animation

Ex21. JavaScript Ticker

<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0 Transitional//EN">

<html>

<head>

<title>Ticker</title>

<link rel="stylesheet" href="main2.css" type="text/css" media="all" />

<style>

h2.mainHeader{font-size:3.5em;padding:0px 0px 0px 5px;color:#000099; font-family:courier}

p.whiteFont{color:#ffffff}

</style>

</head>

<body>

<div id="ticker"><script language="javascript" type="text/javascript" src="feed3.js"></script></div>

</body>

</html>

1. main.css

.default{color:#ffffff;font-weight:900:}

.grey{color:#ff0000;}

.blue{color:#0000ff;}

green{color:#00ff00;}

.red{color:#ff0000;}

.mainHeader{font-size:3.5em;padding:0px 0px 7px 10px;color:#000099}

h2.mainHeader{font-size:3.5em;padding:0px 0px 0px 5px;color:#000099; font-family:courier}

td.gold{background-color:#ffcc33;}

a.linkWhite{color:#ffffff;text-decoration:yes;}

.gold{color:#ffcc33;}

.white{color:#ffffff;}

a.bodyNav{color:#000000;text-decoration:none;}

a.bodyNav:hover{color:#ffcc33;text-decoration:none;}

a.bodyNav2{color:#ffffff;text-decoration:none;}

a.bodyNav2:hover{color:#ffcc33;text-decoration:none;}

a.bodyNavRed{color:#ff0000;text-decoration:none;}

a.bodyNavRed:hover{color:#ffffff;text-decoration:none;}

a.red{color:#ff0000;text-decoration:none;font-weight:bold}

.didyouknow{color:#000099;font-weight:bold;}

.youknowtext{color:#666666;}

#ticker {background-color: #EE351C;width: 100%;margin-bottom: 1px;font-size: 120%;}

#tickerAnchor {padding-top: 4px;padding-left: 4px;padding-right: 4px;height: 19px;color: #ffcc33;font-weight:bold;}

/\* The star html hack will hide a rule from all browsers but IE \*/

\* html #tickerAnchor {height: 24px;}

#ticker H2 {font-size: 100%;display: inline;padding-right: 1em;color:#ffffff;}

1. feed.js

//Allow IE4 to work with us.

if(!document.getElementById && document.all){

document.getElementById = function(id) {return document.all[id];}

}

/\*ticker functions\*/

var theCharacterTimeout = 50;

var theStoryTimeout = 3000;

var theWidgetOne = "\_";

var theWidgetTwo = "-";

var theWidgetNone = "";

var theLeadString = "<h2>Codeunique provides consultancy in</h2>";

var theTips = new Array();

//update or add tips here, single quotes are OK

theTips[0] = "Web Programming, Web Design and Web Standards.";

theTips[1] = "eCommerce";

theTips[2] = "Internet and Interactive TV Broadcasting";

theTips[3] = "Telematics Systems and Services";

theTips[4] = "Web Hosting.";

theTips[5] = "JavaScript";

theTips[6] = "Cascading Stylesheets";

theTips[7] = "Document Object Model";

theTips[8] = "Data Binding";

theTips[9] = "XML and XSLT";

theTips[10] = "Java and JSP";

theTips[11] = "User Data and CGI Email. ";

theTips[12] = "PHP. ";

theTips[13] = "ORACLE.";

theTips[14] = "SQL/PL.";

theTips[15] = "Perl.";

theTips[16] = "C/C++ Programming.";

//end tips

var theItemCount = theTips.length;

if ((document.getElementById) && (document.body.innerHTML)) {

//write div for dhtml broswers to display tips

document.write("<div class='ticker' id='tickerAnchor'></div>");

}else{

//write div for non-dynamic browsers and display random tip

document.write("<div class='ticker'>" + theLeadString + theTips[Math.round(Math.random() \* (theTips.length -1))] + "</div>");

}

// Ticker startup

function startTicker()

{

// Define run time values

theCurrentStory = -1;

theCurrentLength = 0;

// Locate base objects

if (document.getElementById) {

theAnchorObject = document.getElementById("tickerAnchor");

runTheTicker();

}

}

// Ticker main run loop

function runTheTicker()

{

var myTimeout;

// Go for the next story data block

if(theCurrentLength == 0)

{

theCurrentStory++;

theCurrentStory = theCurrentStory % theItemCount;

theStorySummary = theTips[theCurrentStory].replace(/&quot;/g,'"');

thePrefix = "<span class=\"tickerLeadString\">" + theLeadString + "</span>";

}

// Stuff the current ticker text into the anchor

theAnchorObject.innerHTML = thePrefix +

theStorySummary.substring(0,theCurrentLength) + whatWidget();

// Modify the length for the substring and define the timer

if(theCurrentLength != theStorySummary.length)

{

theCurrentLength++;

myTimeout = theCharacterTimeout;

}

else

{

theCurrentLength = 0;

myTimeout = theStoryTimeout;

}

// Call up the next cycle of the ticker

setTimeout("runTheTicker()", myTimeout);

}

// Widget generator

function whatWidget()

{

if(theCurrentLength == theStorySummary.length)

{

return theWidgetNone;

}

if((theCurrentLength % 2) == 1)

{

return theWidgetOne;

}

else

{

return theWidgetTwo;

}

}

startTicker();

Ex22 Moving Elements

<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0 Transitional//EN">

<html>

<head>

<title>Moving Elements</title>

<script language="JavaScript" type="text/javascript">

//this is a hekper function to return 0 as a number and not isNaN

function myParseInt(s) {

var ret = parseInt(s);

return(isNaN(ret) ? 0: ret);

}

</script>

<script language="JavaScript" type="text/javascript">

//the code below animates the banner and stops after 50 iterations

var nr = 0;

var id = null;

function animate() {

nr++;

if(nr > 50){

window.clearInterval(id);

document.getElementById("element").style.visibility = "hidden";

}

else {

var el = document.getElementById("element");

el.style.left = (myParseInt(el.style.left) + 5) + "px";

el.style.posLeft +=5;

el.style.top = (myParseInt(el.style.left) + 5) + "px";

el.style.posTop +=5;

}

}

window.onload = function() {

id = window.setInterval("animate();",100);

};

</script>

</head>

<body>

<h1>My Portal</h1>

<div id="element" style="position:absolute;background-color:#eee;border:;1px solid #ffcc33">Welcome to The City Lit</div>

</body>

</html>

Ex23 Slides

<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0 Transitional//EN">

<html>

<head>

<title>animation</title>

<SCRIPT LANGUAGE="JavaScript" type="text/javascript">

<!--

function openWindow(file) { popupWin = window.open(file, 'popup', 'status=0,menubar="no",resizable="yes",width=400,height=400'); }

//number will be given a value of

var number=6;

src = [];

for (y=number; y>0; y--) {

src[y-1] = y + ".jpg";

}

//set duration for each image

duration = 6;

ads=[]; ct=0;

function switchPic() {

var n=(ct+1)%src.length;

if (ads[n] && (ads[n].complete || ads[n].complete==null)) {

document["pic"].src = ads[ct=n].src;{

if (document.all)

pic.filters.blendTrans.apply();

pic.filters.blendTrans.play();}

}

ads[n=(ct+1)%src.length] = new Image;

ads[n].src = 'images/' + src[n];

setTimeout("switchPic()",duration\*1000);

}

function slide(){

if (document.images)

switchPic();

}

//-->

</SCRIPT>

</head>

<body onLoad="slide();">

<br /><br />

<div align="center">

<table cellspacing="0" cellpadding="0" border="0" align="center" width="360"><tr><td valign="middle"><img name="pic" src="images/1.jpg" width="360" height="130" border="0" style="filter:blendTrans(duration=4)" alt="where is this" /></td></tr></table>

</div>

<br />

</body>

</html>

Ex 24 Embedding Flash Objects

<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0 Transitional//EN">

<html>

<head>

<title>Embeding flash</title>

</head>

<body marginheight="0" marginwidth="0" topmargin="0" leftmargin="0">

<object classid="clsid:d27cdb6e-ae6d-11cf-96b8-444553540000" codebase="http://download.macromedia.com/pub/shockwave/cabs/flash/swflash.cab" id="flashmovie\_1" width="619" height="349">

<param name="src" value="Video\_game\_engine\_game\_WORKING4.swf">

<param name="loop" value="true">

<param name="quality" value="high">

<param name="play" value="true">

<param name="menu" value="true">

<param name="bgcolor" value="#666666">

<param name="allowScriptAccess" value="sameDomain">

<embed pluginspage="http://www.macromedia.com/shockwave/download/index.cgi?P1\_Prod\_Version=ShockwaveFlash" type="application/x-shockwave-flash" name="Video\_game\_engine\_game\_WORKING4" src="Video\_game\_engine\_game\_WORKING4.swf" loop="true" quality="high" play="true" menu="true" bgcolor="#666666" allowscriptaccess="sameDomain" swliveconnect="true" width="619" height="349">

</object>

</body>

</html>

1. **Cookies**

Cookies are tiny files that can be written by JavaScript to store small amounts of data in a local hard drive.

There are limitations to the use of cookies that restrict their size to 4 kilobytes and web browsers are not required to retain more than 20 cookies per web server. Typically a cookie may often retain user data for use across web pages or on subsequent visits to the site.

Ex 25i: Set Cookie

!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0 Transitional//EN">

<html>

<head>

<title>cookie test data1</title>

</head>

<body>

<script type="text/javascript">

<!--

var useraccount="Mike McGrath, 00456";

var expiry= new Date();

expiry.setTime(expiry.getTime() + (7\*24\*60860\*1000) );

document.cookie = "cookiedata="+escape(useraccount) + ";" + "expires=" +expiry.toGMTString() + ";" ;

//-->

</script>

Testing the cookie. The input data in the cookie here will be sought by and split into two parts by a similar cookie in the next page on loading. The split uses regular expression syntax.

</body>

</html>

Get Cookie

**If a cookie is set the document.cookie *property* will return true so JavaScript can test for the prescence of cookies.**

When a cookie is located the document.cookie property returns the stored data string. Parts of the data may be retrieved from the stored string using regular string manipulation methods.

Ex 25ii: Get Cookie

<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0 Transitional//EN">

<html>

<head>

<title>cookie test data1</title>

</head>

<body>

As this second document is loaded into a web browser it first seeks the cookie set by the last example then extract the data value to write customized dynamic content

<br /><br />

<script type="text/javascript">

<!--

var username="Guest",useracct="00000";

if (document.cookie){

var cookiedata=unescape (document.cookie) ;

var userdata=cookiedata.split("=");

if ( userdata[0]=="cookiedata" ) {

var data=userdata[1].split (",") ;

username=data[0];

useracct=data[1];

}

}

document.write ( "Welcome :" +username+ "<br>");

document.write ( "Account number: " +useracct+ ".");

//-->

</script>

</body>

</html>