

Dynamic - HTML

- ❖ D-HTML is the fusion of various web coding technologies that allows *dynamic* web content.
 - ◆ D-HTML allows content presentation to change with user interaction or time
 - ◆ XHTML alone will create static (unchangeable) pages.
 - ◆ D-HTML = XHTML + JavaScript + CSS + EM + DOM
- ❖ EM = Event Model
 - ◆ onclick = Click mouse on object event
 - ◆ onchange = Object state changes event
 - ◆ onkeyup = Key Up after entry event
- ❖ DOM = Document Object Model
 - ◆ document.frmCalc.txtEntry.value
 - ◆
 - ◆ document.imgMain.src

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DHTML - Event Model

- ❖ Events can be used to trigger JavaScript that can manipulate document objects
 - ◆ *Command line programming* is DOS style programming. Prompting for input one at a time.
 - ◆ *Event driven programming* is the paradigm on which windows programming Graphical User Interface and web site interaction are based.
- ❖ Scripts are triggered by events acting upon supported XHTML elements which may include:
 - ◆ Forms
 - ◆ Images
 - ◆ Links
 - ◆ Documents
 - ◆ Windows
 - ◆ Text Elements
- ❖ Scripts can also be triggered by timer events

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DHTML - Mouse Events

EVENT	WORKS WITH	WHEN
onmouseover	Most elements	Mouse cursor over element
onmouseout	Most elements	Mouse cursor moves out of specified element
onmousedown	Most elements	Mouse button down while cursor over element
onmouseup	Most elements	Mouse button released after clicking on element
onmousemove	Most elements	Mouse cursor moves while over the element
onclick	Most elements	Mouse button clicks on specified element
ondblclick	Most elements	Mouse button double clicks on specified element

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Rollovers

- ❖ Rollovers are an image swapping technique
 - ◆ Allows users to swap images when the mouse cursor "rolls over" the image
 - ◆ Rollovers work with the 3.0+ browsers
- ❖ Create two images, one for each mouse rollover state to implement
 - ◆ Best to do editing and save vectored graphic
 - ◆ Then convert each selectable image to gif or jpeg
- ❖ Rollovers use two mouse event handlers
 - ◆ onclick = Mouse over object
 - ◆ onmouseout = Mouse out of object
- ❖ DOM-0: Rollovers use **img tag name attribute**

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Text Rollovers with Image Swapping

```

<html>
<head>
<title>Rollover Demo</title>
<style type="text/css">
a {font-size:12pt; font-weight: bold; text-decoration: none; color: #CC0000}
a:hover {font-size:15pt; text-decoration:underline; background:#FFFFCC;
color:#FF3300}
p {font-size: 18pt}
</style>
</head>
<body>
<p>
<a href=" ../index.html"
onmouseover="document.imgBul1.src='bltDiamondV.gif'"
onmouseout="document.imgBul1.src='bltDiamond.gif'">Malaysia</a></p>
<p>
<a href=" ../index.html"
onmouseover="document.imgBul2.src='bltDiamondV.gif' "
onmouseout="document.imgBul2.src='bltDiamond.gif' ">Indonesia</a></p>
</body></html>
    
```

◆ Malaysia

◆ Indonesia

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Two Text Links affecting the same Image

```

<html> <head>
<title>Rollover Demo</title>
<script type="text/javascript" language="JavaScript">
function Huron()
{
document.imgMain.src='HuronsP.jpg';
}
function GullRock()
{
document.imgMain.src='GulRockP.jpg';
}
</script>
</head>
<body bgcolor="#CCFFCC" text="#000000">
<h4>Lake Superior, Upper Peninsula of Michigan</h4>
<p><a href="javascript:Huron()">Huron Islands</a><br />
<a href="javascript:GullRock()">GullRock</a></p>
<p></p>
</body> </html>
    
```

Lake Superior, Upper Peninsula of Michigan

Huron Islands
GullRock

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AntiSpam E-mail Hyperlink

```

<html> <head> <title>Electronic Mail Harvester Vaccine</title>
<script type="text/javascript" src="AntiSpam.js"> </script> </head>
<body>
<h3>Please send mail I am lonely:
<script type="text/javascript">
AntiSpam("gro", "nameht", "namdnalsi", "Your Web Site", "Email Me");
</script> <br />
My Address:
<script type="text/javascript">
AntiSpam("gro", "nameht", "namdnalsi", "Second Link", "");
</script> <br />
Send Mail:
<script type="text/javascript">
AntiSpam("gro", "nameht", "namdnalsi", "Image Link",
"img src='MailBox.gif' border='\0V'");
</script>
</h3>
</body>
    
```

Please send mail I am lonely: [Email Me](#)

My Address: theman@islandman.org

Send Mail:

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```

//RevString function reverses the order of characters in a string
function RevString(StrIn)
{
var StrOut= new String("");
for(var i=StrIn.length-1; i>=0; i--)
StrOut += StrIn.charAt(i);
return StrOut;
}
// AntiSpam function encodes hyperlinked email address to hide from spammers
function AntiSpam(Tpld, User, Domn, Subj, Hlnk)
{
// <A> Element components
var AEImt = new Array('<a href="ma', '</a>', 'mailto:', '?subject=', '\>');
// Reverse character order for each component of address
var At2 = "4";, At1 = "&#6"; // at symbol
var Addr, LinkObj;
Addr = RevString(User);
Addr += At1 + At2;
Addr += RevString(Domn);
Addr += ".";
Addr += RevString(Tpld);
if(Hlnk!="")
LinkObj = Addr;
else
LinkObj = Hlnk;
document.writeln(AEImt[0]+AEImt[2]+Addr+AEImt[3]+Subj+AEImt[4]+LinkObj+AEImt[1]);
}
    
```