MOVING ELEMENTS AND ELEMENT VISIBILITY

Moving Elements

Dynamic movement of 'relative'ly /'absolute'ly positioned elements can provide animation effects in scripting environments. Element position is going to be changed by modifying the left and top properties of the element's style property. If position is set to absolute, the element moves to the new values of top and left, if its position is set to relative, it moves from its original position by distances given by the new values of top and left. The following example demonstrates this

```
<?xml version = "1.0" encoding = "utf-8"?>
<!DOCTYPE html PUBLIC "-//w3c//DTD XHTML 1.1//EN"
  "http://www.w3.org/TR/xhtml11/DTD/xhtml11.dtd">
<html xmlns = "http://www.w3.org/1999/xhtml">
<! – move.html -- >
<title>Position</title>
<style type="text/css">
#divBlock {
 position:relative;
 height:100px;
 width:100px;
 top:100px;
 left:100px;
 background-color:red;
}</style>
<script type="text/javascript">
function init(){

 document.getElementById("divBlock").style.top = "100px";
 document.getElementById("divBlock").style.left = "100px";
}
function moveH(elem, distance){
 var objElem = document.getElementById(elem);
 var curLeft = parseInt(objElem.style.left);
 objElem.style.left = (curLeft + distance) + "px";
}
```

```
function moveV(elem, distance){
 var objElem = document.getElementById(elem);
 var curTop = parseInt(objElem.style.top);
 objElem.style.top = (curTop + distance) + "px";
}
</script>
</head>
<body onload="init();">
<form>
<input type="button" value="Left" onclick="moveH('divBlock',-10);">
<input type="button" value="Right" onclick="moveH('divBlock',10);">
<input type="button" value="Up" onclick="moveV('divBlock',-10);">
<input type="button" value="Down" onclick="moveV('divBlock',10);">
</form>
<div id="divBlock"></div>
</body>
</html>
```
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Output

      In the output user can move the square in the 4 different directions by clicking the appropriate button.

      The init() function set the top and left properties of the divBlock div, thus making the properties accessible to JavaScript.

      The moveH() function uses parseInt() to cut off the units (e.g, px) from the value of the left property of the div and assign the resulting integer to the curLeft variable. It then modifies the left property of the element by adding the value passed in for distance.

      The moveV() function does the same thing, but it modifies the top property rather than the left property.The functions are triggered with onclick event handlers.

Element Visibility

      Document elements can be specified to be visible or hidden with the values if their visibility property. The two possible values for the visibility are – visible and hidden.

      The following example displays the 4 table elements and allows the user to toggle each table element causing the element to appear and disappear in the document display.

Output

```
<?xml version = "1.0" encoding = "utf-8"?>
<!DOCTYPE html PUBLIC "-//w3c//DTD XHTML 1.1//EN"
  "http://www.w3.org/TR/xhtml11/DTD/xhtml11.dtd">
<html xmlns = "http://www.w3.org/1999/xhtml">
<head>
<title>Showing and Hiding Elements with JavaScript</title>
</head>
<!—vis.html -->
<script type="text/javascript">

function changeVisibility(TR){
 if (document.getElementById(TR).style.visibility=="hidden") {
  document.getElementById(TR).style.visibility = "visible";
 } else {
  document.getElementById(TR).style.visibility = "hidden";
 }
}
</script>
<body>
<h1>Hiding and Showing Elements</h1>
<table >
 <tr id="tr1"><td>tableElem Row 1</td></tr>
 <tr id="tr2"><td>tableElem Row 2</td></tr>
 <tr id="tr3"><td>tableElem Row 3</td></tr>
 <tr id="tr4"><td>tableElem Row 4</td></tr>
</table>
<form>
 <h2>visibility</h2>
 <input type="button" onclick="changeVisibility('tr1')" value="TR1">
 <input type="button" onclick="changeVisibility('tr2')" value="TR2">
 <input type="button" onclick="changeVisibility('tr3')" value="TR3">
 <input type="button" onclick="changeVisibility('tr4')" value="TR4">
</form>
</body>
</html>
```