



# JavaScript Rollover Buttons

## Webworks – A Workshop Series in Web Design (Session 8)

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### 1. Introduction

You see rollover buttons all over the web, mostly on navigation bars. When the mouse is over a button on the navigation bar, it appears depressed; when the mouse moves on, it appears just as it did before. Rollovers can also be used simply to change one picture for another when the mouse hovers over it.

### 2. Creating your buttons

The first thing you're going to need to do is create two sets of buttons, using Photoshop or some other type of graphics program—one set that appears when the mouse is over the buttons and one set to appear when the mouse is off the buttons. When the mouse moves onto a button image, which by default is off, our code will swap the off button image for the on button image, and likewise, when the mouse moves off of the on button image, our code will swap it for the off button image. It's a good idea to be consistent with your naming of the buttons so that you can easily keep track of them. For example, the on buttons could be named "home\_on.gif", "about\_on.gif" and so on, while the off buttons could be named "home\_off.gif", "about\_off.gif" and so on. To make the on buttons seem as if they are depressed in comparison to the off buttons, you just need to move the image or lettering on them down and to the right by a couple pixels.

### 3. Javascript Step by Step

**A.** First we need to let the browser know that we're writing JavaScript, and so we type the `<script>` tags in the head of our HTML document and enclose our JavaScript code within these tags.

```
<script language="JavaScript"> JS code here </script>
```

**B.** Then we are going to create two arrays, one for the off buttons and one for the on buttons. (Arrays are essentially variables that can store lists of items.)

```
var onArray = new Array("button1_on.gif", "button2_on.gif",  
"button3_on.gif", "button4_on.gif", "button5_on.gif",  
"button6_on.gif");  
  
var offArray = new Array("button1_off.gif", "button2_off.gif",  
"button3_off.gif", "button4_off.gif", "button5_off.gif",  
"button6_off.gif");
```

We can access the elements of these arrays by typing `arrayName[index]`, where "index" is the index number of the element. The elements are numbered starting at zero such that `offArray[0]` would refer to the first element, "button1\_off.gif", and `offArray[1]` would refer to the second element, "button2\_off.gif".

**C.** Once we've created our arrays, we can write the functions that will change the off button images for the on button images and vice versa.

```
function showOnButton(index) {
    document.images[index].src = "buttons/" + onArray[index];
}

function showOffButton(index) {
    document.images[index].src = "buttons/" + offArray[index];
}
```

These essentially say, using the example of the first button on our page and in our arrays, "when the mouse hovers over `picture[0]`, change the `picture[0]` source to be "buttons/onArray[0]", which corresponds to "buttons/button1\_on.gif". And when the mouse moves off `picture[0]`, change the `picture[0]` source to be "buttons/offArray[0]", which corresponds to "buttons/button1\_off.gif". Note that this code assumes that you've saved your buttons in a file called "buttons" and that your first button is the first image on your page. If your first button were to be the third actual image on your page, you would have to write:

```
document.images[index+3].src = "buttons/" + onArray[index];
```

**D.** Now all that we have left to do is tell the browser when to call these functions. Conveniently, the `<A>` tag of HTML has the two attributes, `ONMOUSEOVER` and `ONMOUSEOUT`, which can call our functions.

```
<a href="pageone.html"
    ONMOUSEOVER="showOnButton(0);"
    ONMOUSEOUT="showOffButton(0);"
    
</a>
```

This code sets up the off button as the default image to be shown on the page and tells the browser to execute our `showOnButton` function when the mouse is over the image and the `showOffButton` function when the mouse moves off the image. Since our parameter is 0, the first image on the page will be accessed as well as the first element of our array.

## 4. The Fine Print

**A.** If want to create a navigation bar with rollover buttons which will appear on each of your site's pages, you will probably want to create a separate JavaScript file which will then load into each of your pages, rather than contain your code within each HTML file. This way, if you need to change the code for any reason, you will only need to change it in one location, rather

than multiple locations. To do this, you would create a notepad file containing your JavaScript code, name it "javascript.js" or something similar and you would type the following in the head of your HTML file:

```
<script src="javascript.js" language="JavaScript"></script>
```

This tells the browser to look for instructions in the file called "javascript.js."

## B. The Full Code

```
<html>
<head>
<title>Rollover Demo</title>

<script language="JavaScript">

var onArray = new Array("button1_on.gif", "button2_on.gif",
"button3_on.gif", "button4_on.gif", "button5_on.gif",
"button6_on.gif");

var offArray = new Array("button1_off.gif", "button2_off.gif",
"button3_off.gif", "button4_off.gif", "button5_off.gif",
"button6_off.gif");

function showOnButton(index) {
    document.images[index].src = "buttons/" + onArray[index];
}

function showOffButton(index) {
    document.images[index].src = "buttons/" + offArray[index];
}

</script>
</head>

<body>
<table>
  <tr>
    <td colspan=6><h1>Rollover Demo</h1></td>
  </tr>
  <tr>
    <td><a href="pageone.html "
      ONMOUSEOVER="showOnButton(0);"
      ONMOUSEOUT="showOffButton(0);"
      
    </a></td>
    <td><a href="pagetwo.html "
      ONMOUSEOVER="showOnButton(1);"
      ONMOUSEOUT="showOffButton(1);"
      
    </a></td>
```

```
<td><a href="pagethree.html"
  ONMOUSEOVER="showOnButton(2);"
  ONMOUSEOUT="showOffButton(2);"
  
</a></td>
<td><a href="pagefour.html"
  ONMOUSEOVER="showOnButton(3);"
  ONMOUSEOUT="showOffButton(3);"
  
</a></td>
<td><a href="pagefive.html"
  ONMOUSEOVER="showOnButton(4);"
  ONMOUSEOUT="showOffButton(4);"
  
</a></td>
<td><a href="pagesix.html"
  ONMOUSEOVER="showOnButton(5);"
  ONMOUSEOUT="showOffButton(5);"
  
</a></td>
</tr>
</table>
</body>
</html>
```