

JavaScript Exercises 1

Exercise 1: Pop up Windows

In the first exercise we are going to use JavaScript to open a new webpage when we click on a link. There is a predefined method called `window.open` which we can use to do this. The list of arguments that `window.open` expects to see in brackets can be found on the internet, with a quick search. Type in the following script and save it as:

popup1.js

```
function openit( url )
{
    window.open( url, 'window1', 'scrollbars = yes, resizable = no, width =
690, height = 300' );
}
```

Now we need a webpage which will call this function when we click on a hyperlink. Note the use of the `<script>` tag, which tells the browser where the scripts are stored.

poppage01.htm

```
<html>
<head>
  <script language="JavaScript" src="popup1.js"></script>
</head>
<body>
  <p>
    <a href="JavaScript:openit('simplepage1.htm')">Click Here</a>
  </p>
</body>
</html>
```

We had also better provide a simple page so that there is something to appear in the window, when it pops up. Type in the following and save as:

simplepage1.htm

```
<html>
<head>
</head>
<body bgcolor="red">
  <p>
    <h1>This is a simple html page</h1>
  </p>
</body>
</html>
```

Try opening `poppage01.htm` in your browser and seeing what happens. For the sake of the exercise, I am using the deprecated attribute `'bgcolor'` although really this should be done with CSS.

You may find that you have to switch off the pop up blocker, which most browsers are now equipped with before it will work.

Exercise 2: Opening two windows

Now we will add a second function to our script file, which will open a second window. It will be a different size, and we will also be able to change its size.

Make the following changes to popup1.js and save it as:

popup2.js

```
function openit( url )
{
    window.open( url, 'window1', 'scrollbars = yes,
                                resizable = no, width = 690, height = 300');
}

function openit2( url )
{
    window.open( url, 'window2', 'scrollbars = no,
                                resizable = yes, width = 200, height = 200');
}
```

We will also provide a second link.

Make the following changes to poppage01.htm and save it as:

poppage02.htm

```
<html>
<head>
  <script language = "JavaScript" src="popup2.js"></script>
</head>
<body>
  <p>
    <a href = "JavaScript:openit('simplepage1.htm')">Click Here</a>
  </p>
  <p>
    <a href = "JavaScript:openit2('anotherpage1.htm')">Click Here too</a>
  </p>
</body>
</html>
```

Again, we had better provide a second simple page which can be opened in the new window.

anotherpage1.htm

```
<html>
<head>
</head>
<body bgcolor="green">
  <p><h1>This is another html page</h1></p>
</body>
</html>
```

Exercise 3: Providing Close Buttons

There are two ways in which we could close the two popup windows, both using the same `window.close` method. One is to use a button on a form, and attach to it a Javascript command which is triggered when the `onClick` event is detected.

Make the following changes to `simplepage1.htm` and save it as:

simplepage2.htm

```
<html>
  <head>
  </head>
  <body bgcolor="red">
    <p>
      <h1>This is a simple html page</h1>
    </p>
    <form>
      <input type="button" value="Close Window" onClick="window.close()">
    </input>
    </form>
  </body>
</html>
```

The other method is to associate a Javascript command directly with an anchor tag (`<a>`).

Make the following changes to `anotherpage1.htm` and save it as:

anotherpage2.htm

```
<html>
  <head>
  </head>
  <body bgcolor="green">
    <p>
      <h1>This is another html page</h1>
      <a href="javascript:window.close()">Close Window</a>
    </p>
  </body>
</html>
```

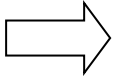
Also make sure that you make the necessary changes to `poppage02.htm` so that it will be these two pages that are loaded when you click on the links.

Exercise 4: Creating Rollover Links

We are going to create an image of an arrow. Furthermore, we want the arrow to change colour when the mouse pointer is over the image.

The trick is to have two identical images, except that they are different colours, and to use the onmouseover and onmouseout events to change them over.

Use Paint or a similar graphics package to create a small image of an arrow, like this:



Make it 200 pixels wide by 100 pixels high. Colour it in red and save it as redarrow.gif

Copy it, colour it blue, and save it as bluearrow.gif.

Make sure they are both saved in the same folder as the webpages.

Then type in the following and save it as:

rollover01.htm

```
<html>
  <head>
  </head>
  <body>
    <p>
      <img src = "blueArrow.gif"
          name = "arrow"
          onmouseover = "document.arrow.src = 'redArrow.gif' "
          onmouseout = "document.arrow.src = 'blueArrow.gif' "
          />
    </p>
  </body>
</html>
```

Load Rollover01.htm and see if it works.

Modify it so that when you click on the image, it displays a picture of an explosion – or a fluffy kitten – or anything else you can find on the internet.