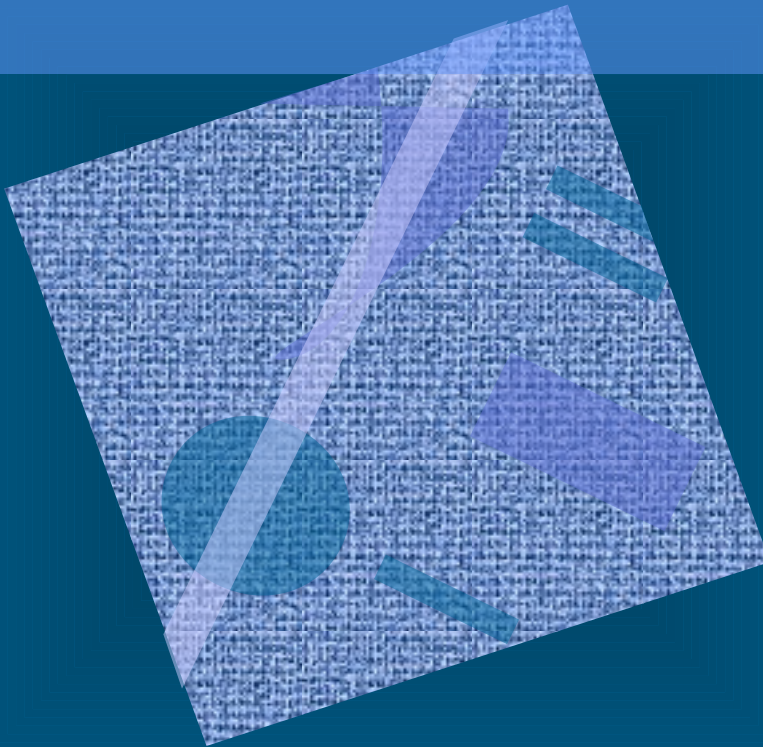


# COMS 469: Interactive Media II

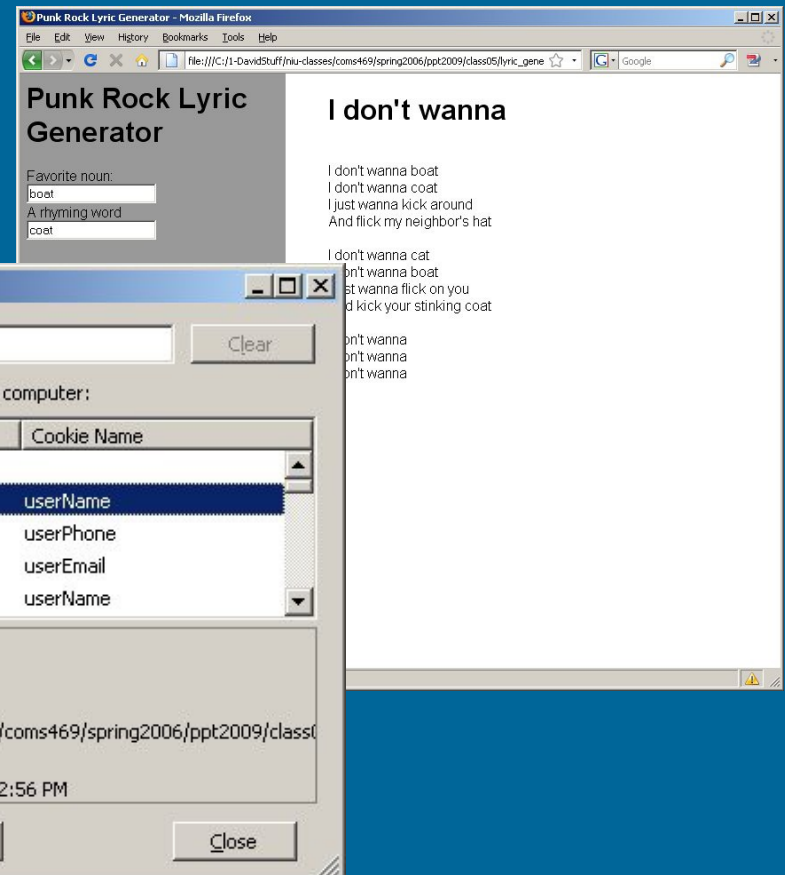


# Agenda

- Review
- Ch. 10: Date, Time and Timers (347-366)
- Ch. 12: Dynamic HTML and the W3C DOM (pp. 391-468)
- Project One

# Review

- Frames & Windows
- Cookies



```
<html>
<head>
  <title>People</title>

  <script type="text/javascript">

    var newWindow;

    function openWindow(pageURL)
    {
      newWindow = window.open(pageURL,"stalin","width=700,height=500");
      newWindow.focus();
      return false;
    }

  </script>

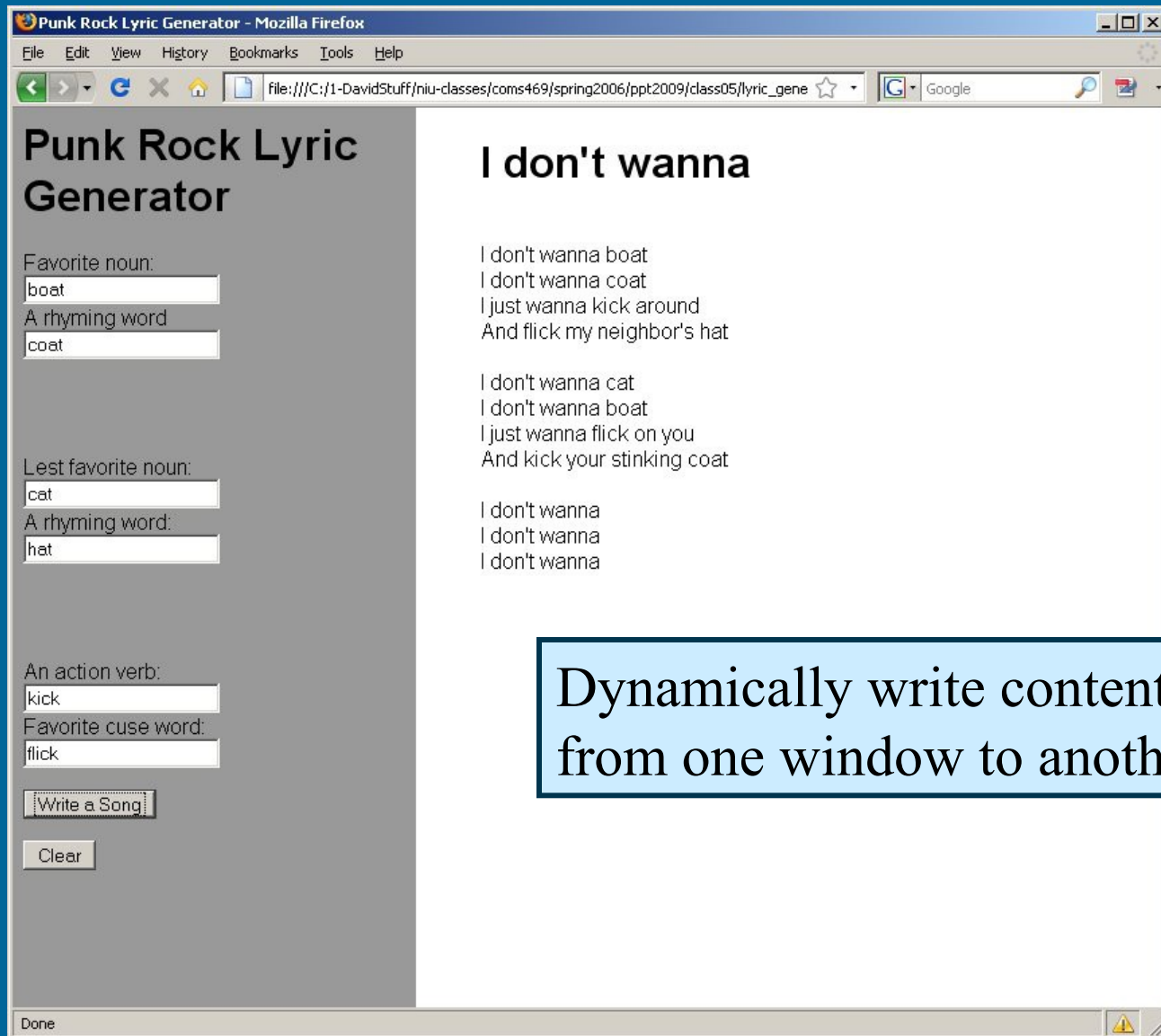
</head>

<body link="#5555dd" vlink="#5555dd">
<blockquote>
<h1>People</h1>
<p>The people of the massive Widgets corporation are ruthless bastards who
would cheat their own mother if they had the chance. Their number one goal
is to exploit as many third-world nations as is possible and squeeze every
stinkin' penny from these struggling economies.</p>
<ul>
  <li><a href="jstalin.html" onClick="return openWindow('jstalin.html')">
    Joseph Stalin
  </a></li>

  <li><a href="mpoppins.html">
    Mary Poppins
  </a></li>
</ul>
</blockquote>
</body>
</html>
```

## Open a New Window





Dynamically write content  
from one window to another

# Review

- Cookies

```
cookies - Notepad
File Edit Format View Help

# HTTP Cookie File
# http://www.netscape.com/newsref/std/cookie_spec.html
# This is a generated file! Do not edit.
# To delete cookies, use the Cookie Manager.

FALSE 1066520432 NSCPHPAD1 set|10665204323
FALSE 1066696832 adsPopup0 1066437631468|.
FALSE 1093577159 sampler 1062818763|www.newyorkf
FALSE 1097976311 ERUBE_ELE_NUM_PICS 24|.goo
FALSE 2147368448 PREF
ID=692e230f732455b3:TM=1062822851:LM=1062822851:S=E2NH7
FALSE /servlet/ FALSE 1069017858 Cookie.
themes.mozdev.org FALSE / FALSE 1097974
ads.specificpop.com FALSE / FALSE 1609459
1477932250|.atdmt.com TRUE / FALSE 1220572
1062972629-1141314649/1064182433|ads.specificpop.com
1609459199 fci 10-385-1-1065906168-1|.insightf
FALSE 1097973632 aol072103 1441798|.atwola
FALSE 1097871515 badsrfi V0617c7cc4fc12e2fb3f8ef
www.scrapbook-bytes.com FALSE / FALSE 1096809
cb67df8224e578354d996e4f3207b061|www.scrapbook-bytes.co
FALSE 1068259480 defperpage 9|www.scrapbook
FALSE 1094403676 bblastvisit 1062867675|www.
FALSE / FALSE 1096809842 bbuserid
FALSE 1072425601 session-id 104-4686466-895
FALSE 2082787202 ubid-main 430-4398932-615
FALSE 1072425601 session-id-time 1072425600|.ana
FALSE 2082787206 x-main d5@zWIK9p7HTUeJriZURIpq
TRUE / FALSE 1066588208 m1
7619:3:21559:5142:1066415334|10789:1:24591:190:10664153
5340|8113:1:18494:6225:1066415328|
FALSE 1066506983 m3
5902:1:14092:1632:1066334177|
FALSE 2145916801 ANON_ID NFMCFMHLNUU|.fastclick
FALSE 1067020086 m2
9504:1:21549:5:1066415284|10596:1:24202:26:1065905008|
.fastclick.net TRUE / FALSE 1125179992
```

Cookies

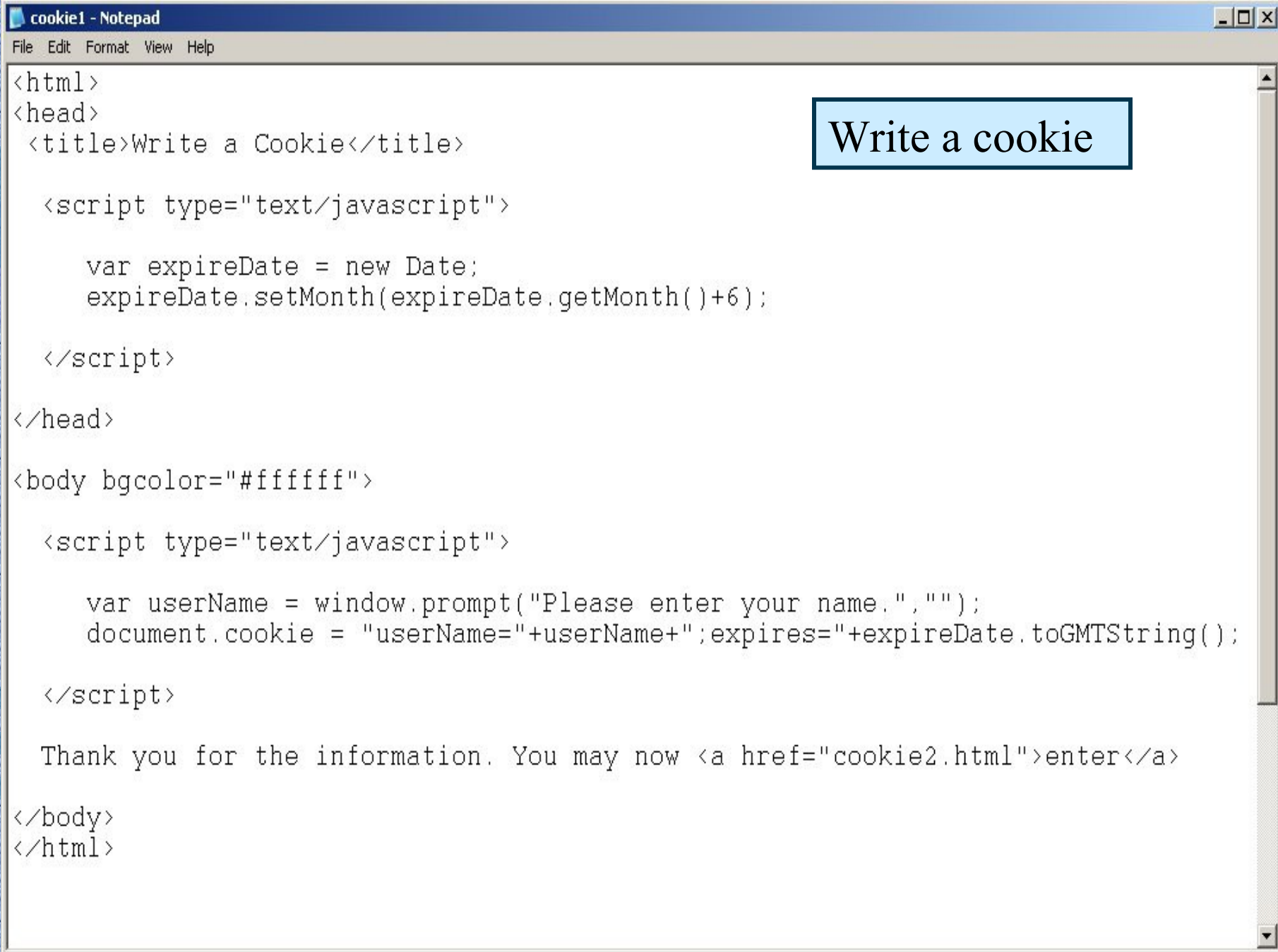
Search:  Clear

The following cookies are stored on your computer:

Site	Cookie Name
	userName
	userPhone
	userEmail
	userName

Name: userName  
Content: Joseph  
Host:  
Path: /C:/1-David5tuff/niu-classes/coms469/spring2006/ppt2009/class0  
Send For: Any type of connection  
Expires: Friday, August 07, 2009 1:12:56 PM

Remove Cookie Remove All Cookies Close



```
cookie1 - Notepad
File Edit Format View Help

<html>
<head>
  <title>Write a Cookie</title>

  <script type="text/javascript">

    var expireDate = new Date;
    expireDate.setMonth(expireDate.getMonth()+6);

  </script>
</head>
<body bgcolor="#ffffff">

  <script type="text/javascript">

    var userName = window.prompt("Please enter your name.", "");
    document.cookie = "userName="+userName+"; expires="+expireDate.toGMTString();

  </script>

  Thank you for the information. You may now <a href="cookie2.html">enter</a>

</body>
</html>
```

Write a cookie

cookie2 - Notepad

File Edit Format View Help

Read a cookie

```
<html>
<head>
  <title>Write a Cookie</title>
</head>

<body bgcolor="#ffffff">
<blockquote>

  <script type="text/javascript">

    if (document.cookie.userName != "")
    {
      document.write("<h3>Hello, " + document.cookie.split("=")[1] + "...</h3>");
    }

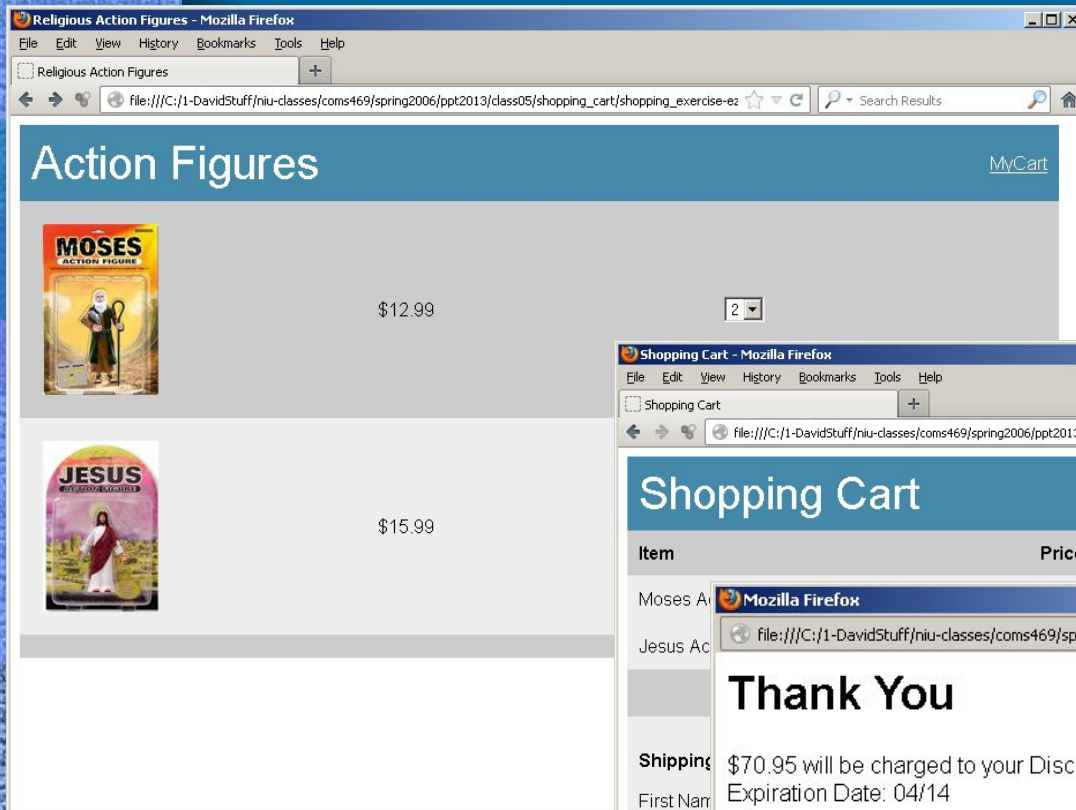
  </script>

<p style=font-size:18px;color:#333333">
Welcome to the homepage of Widgets International. We are an impersonal,
multinational corporation that takes pride in exporting American jobs overseas,
where we can hire children for a dollar a day, pollute the environment, and
participated in all kinds of political corruption without pesky government
regulators looking over our shoulders.</p>
</blockquote>

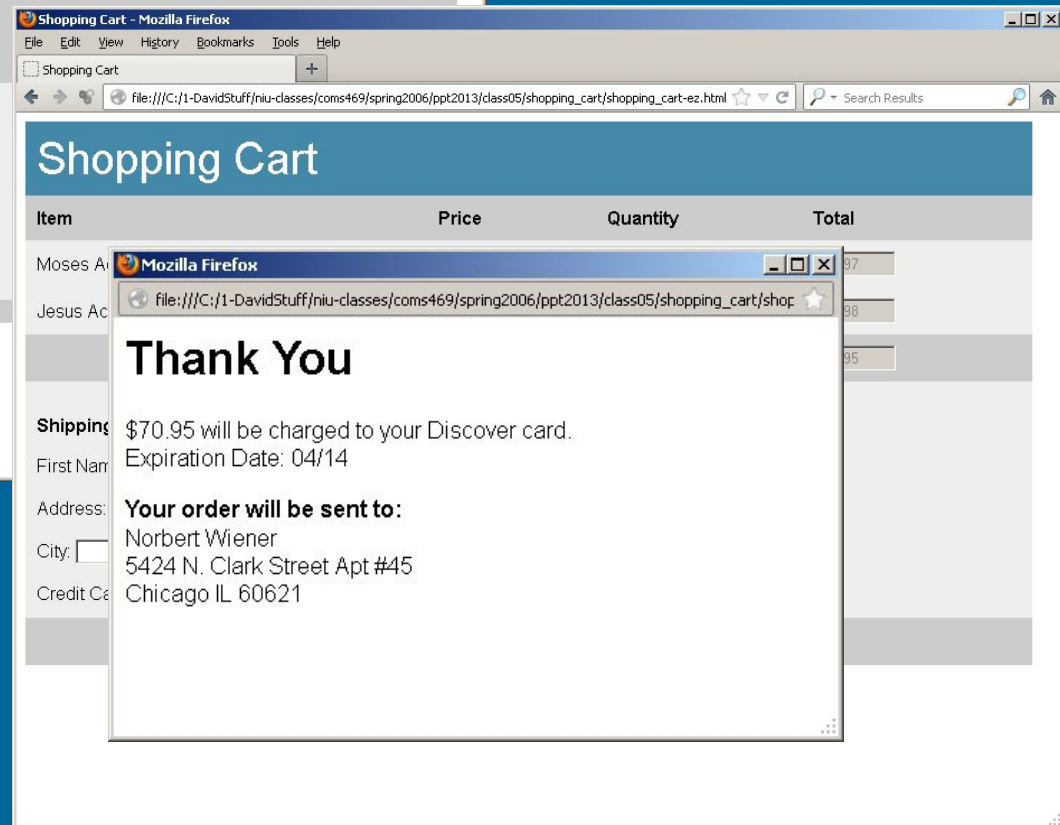
</body>
</html>
```



# Basic Shopping Cart Exercise



Page 1



Page 2

```

<html>
<head>
  <title>Religious Action Figures</title>
  <script type="text/javascript">
<script type="text/javascript">
  function writeCookie()
  {
    var expireDate = new Date;
    expireDate.setMonth(expireDate.getMonth()+1);

    mosesQt=document.forms[0].moses.value;
    document.cookie = "mosesQt="+mosesQt+";expires=" +expireDate.toGMTString();

    jesusQt=document.forms[0].jesus.value;
    document.cookie = "jesusQt="+jesusQt+";expires=" +expireDate.toGMTString();
  }
</script>

```

```

<td width="200"> $12.99</td>
<td width="200">
  <select name="moses">
    <option value="0" selected>0</option>
    <option value="1">1</option>
    <option value="2">2</option>
    <option value="3">3</option>
    <option value="4">4</option>
    <option value="5">5</option>
  </select></td></tr>
<tr bgcolor="#eeeeee">
<td width="200"></td>
<td width="200">$15.99</td>
<td width="200">
  <select name="jesus">
    <option value="0" selected>0</option>
    <option value="1">1</option>
    <option value="2">2</option>
    <option value="3">3</option>
    <option value="4">4</option>
    <option value="5">5</option>
  </select></td></tr>
<tr bgcolor="#cccccc">
  <td colspan="4" align="right"> </td></tr>
</table>
</form>
</body>
</html>

```

Define a function writeCookie( )  
Store the value of mosesQt and JesusQt

Page One  
Modify action figure  
order form

```

<html>
<head>
  <title>Religious Action Figures</title>
  <script type="text/javascript">
    function writeCookie()
    {
      var expireDate = new Date();
      expireDate.setMonth(expireDate.getMonth() + 1);

      mosesQt=document.forms[0].mosesQt;
      document.cookie = "mosesQt=" + mosesQt + "; expires=" + expireDate.toGMTString();

      jesusQt=document.forms[0].jesusQt;
      document.cookie = "jesusQt=" + jesusQt + "; expires=" + expireDate.toGMTString();
    }
  </script>
</head>
<body bgcolor="#ffffff" link="#ffff00">
<form onSubmit="shoppingCart()">
  <table border="0" cellspacing="0" cellpadding="10" width="900">
    <tr bgcolor="#4488aa">
      <td colspan="2" style="font-size:10px; color:#ffffff">Action Figures</td>
      <td align="right"><a href="shopping_cart-ez.html" onClick="writeCookie()">MyCart</a></td></tr>
    <tr bgcolor="#cccccc">
      <td width="200"></td>
      <td width="200">$12.99</td>
      <td width="200">
        <select name="moses">
          <option value="0" selected>0</option>
          <option value="1">1</option>
          <option value="2">2</option>
          <option value="3">3</option>
          <option value="4">4</option>
          <option value="5">5</option>
        </select></td></tr>
    <tr bgcolor="#eeeeee">
      <td width="200"></td>
      <td width="200">$15.99</td>
      <td width="200">
        <select name="jesus">
          <option value="0" selected>0</option>
          <option value="1">1</option>
          <option value="2">2</option>
          <option value="3">3</option>
          <option value="4">4</option>
          <option value="5">5</option>
        </select></td></tr>
    <tr bgcolor="#cccccc">
      <td colspan="3" align="right"></td></tr>
  </table>
</form>
</body>
</html>

```

- Call the function writeCookie( ) from the anchor tag – link on the word MyCart
- Clicking the link loads the next page and writes the cookie.

**Page One**  
Modify action figure  
order form



```

<html>
<head>
  <title>Religious Action Figures</title>
  <script type="text/javascript">
    function writeCookie()
    {
      var expireDate = new Date;
      expireDate.setMonth(expireDate.getMonth()+1);

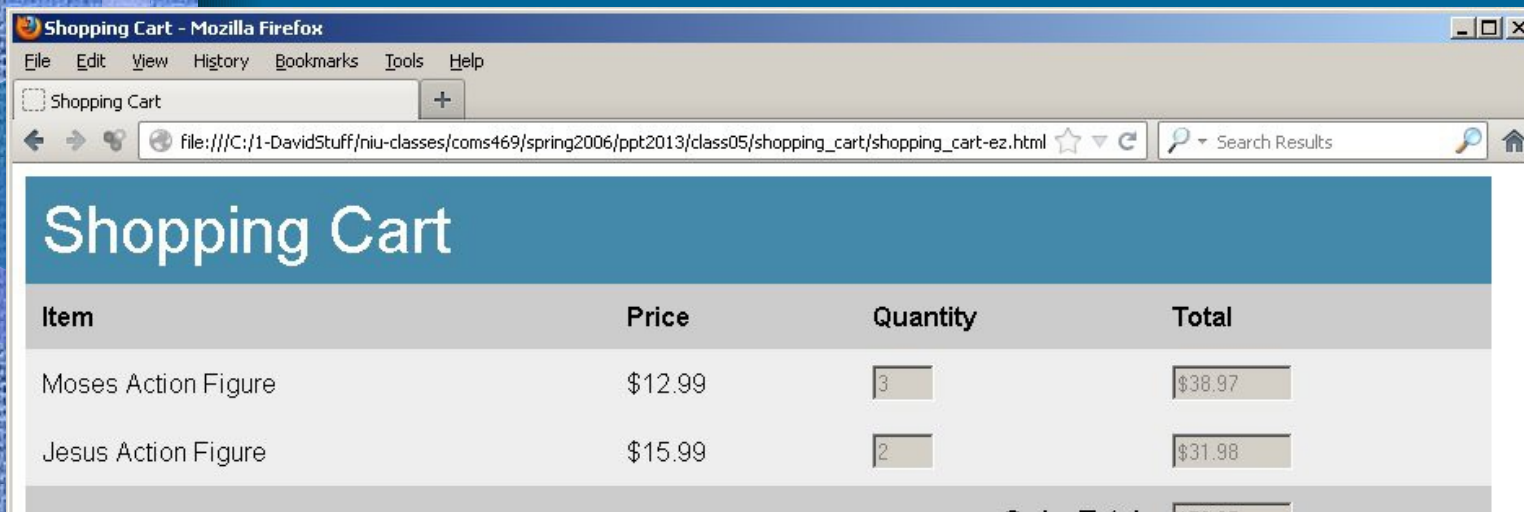
      mosesQt=document.forms[0].moses.value;
      document.cookie = "mosesQt="+mosesQt+";expires=" +expireDate.toGMTString();

      jesusQt=document.forms[0].jesus.value;
      document.cookie = "jesusQt="+jesusQt+";expires=" +expireDate.toGMTString();
    }
  </script>
</head>
<body bgcolor="#ffffff" link="#ffffff" vlink="#ffffff">
<form onSubmit="shoppingCart()">
  <table border="0" cellspacing="0" cellpadding="10" width="900">
    <tr bgcolor="#4488aa">
      <td colspan="2" style="font-size:40px; color:#ffffff">Action Figures</td>
      <td align="right"><a href="shopping_cart-ez.html" onClick="writeCookie()">MyCart</a></td></tr>
    <tr bgcolor="#cccccc">
      <td width="200"></td>
      <td width="200">$12.99</td>
      <td width="200">
        <select name="moses">
          <option value="0" selected>0</option>
          <option value="1">1</option>
          <option value="2">2</option>
          <option value="3">3</option>
          <option value="4">4</option>
          <option value="5">5</option>
        </select></td></tr>
    <tr bgcolor="#eeeeee">
      <td width="200"></td>
      <td width="200">$15.99</td>
      <td width="200">
        <select name="jesus">
          <option value="0" selected>0</option>
          <option value="1">1</option>
          <option value="2">2</option>
          <option value="3">3</option>
          <option value="4">4</option>
          <option value="5">5</option>
        </select></td></tr>
    <tr bgcolor="#cccccc">
      <td colspan="4" align="right"></td></tr>
  </table>
</form>
</body>
</html>

```

**Page One**  
Modify action figure  
order form





## Page Two

- Read the mosesQt and jesusQt from the cookie
- Calculate totals by using the value of these quantities
- Collect info from the user with an HTML form
- Dynamically write the receipt to a new Window

1. [Introduction](#)

|
| `<tr bgcolor="#cccccc">` | |
 **Price** | **Total** | Moses Action Figure |  |

```
<tr bgcolor="#eeeeee">
```

 \$15.99 | <td><input type="text" | ali | | |

```
<tr bgcolor="#eeeeee">
```

<p>First Name: <i>

<p>Address: <input type="text" value="127.0.0.1" />

<n>City: <input type="text"/>

Enbren: Zip Code

Option value

```
<option value="Discover">Discover</option>
```

```
Color: Number: 
```

```

subvar: Error: <input type="text" name="errDate" size="5"> </>

```

[illegible]  | | | |

&lt;/body&gt;

&lt;/html&gt;

- HTML form – Combine elements from the Action Figure form with fields for user data
- Call the function `receipt( )` with an `onClick` event handler on the submit button
- Call the function `addValues( )` with an `onClick` event handler in the `<body>` tag

```

<body bgcolor="#ffffff" onLoad="addValues()">
<form>
  <table border="0" cellspacing="0" cellpadding="10" width="900">
    <tr bgcolor="#4488aa">
      <td colspan="4" style="font-size:40px; color:#ffffff">Shopping Cart</td>
    <tr bgcolor="#cccccc">
      <td><b>Item</b></td>
      <td><b>Price</b></td>
      <td><b>Quantity</b></td>
      <td><b>Total</b></td></tr>
    <tr bgcolor="#eeeeee">
      <td>Moses Action Figure</td>
      <td>$12.99</td>
      <td><input type="text" name="mosesQtfield" size="2" maxlength="2" disabled></td>
      <td><input type="text" name="mosesSubTotal" size="8" disabled></td></tr>
    <tr bgcolor="#eeeeee">
      <td>Jesus Action Figure</td>
      <td>$15.99</td>
      <td><input type="text" name="jesusQtfield" size="2" maxlength="2" disabled></td>
      <td><input type="text" name="jesusSubTotal" size="8" disabled></td></tr>

    <tr bgcolor="#cccccc">
      <td colspan="3" align="right"><b>Order Total</b></td>
      <td><input type="text" name="total" size="8" disabled></td></tr>
    <tr bgcolor="#eeeeee">
      <td colspan="4"><br><b>Shipping and Payment Information</b>
      <p>First Name: <input type="text" name="firstName" size="20">
      &nbsp; Last Name: <input type="text" name="lastName" size="20"></p>
      <p>Address: <input type="text" name="address" size="40">
      &nbsp; Apt#: <input type="text" name="apt" size="4"></p>
      <p>City: <input type="text" name="city" size="40">
      &nbsp; State: <input type="text" name="state" size="2" maxlength="2">
      &nbsp; Zip Code: <input type="text" name="zip" size="5" maxlength="5"></p>
      <p>Credit Card: <select name="creditCard">
        <option value="Visa" selected>Visa</option>
        <option value="Master Card">Master Card</option>
        <option value="Discover">Discover</option>
      </select>
      &nbsp; Number: <input type="text" name="cardNumber" size="18">
      &nbsp; Exp Date: <input type="text" name="expDate" size="5"></p>
    <tr bgcolor="#cccccc">
      <td colspan="4" align="center"><input type="submit" value="Submit" onClick="receipt()"></b></td></tr>
  </table>
</form>
</body>
</html>

```



```
<html>
<head>
  <title>Shopping Cart</title>

  <script type="text/javascript">

    var mosesPrice=12.99;
    var jesusPrice=15.99;

    if (document.cookie != "")
    {
      item1 = document.cookie.split("mosesQt=") [1];
      mosesQt = item1.split(";") [0];

      item2 = document.cookie.split("jesusQt=") [1];
      jesusQt = item2.split(";") [0];
    }

    function addValues()
    {
      mosesTotal = mosesQt * mosesPrice;
      jesusTotal = jesusQt * jesusPrice;
      grandTotal = mosesTotal + jesusTotal;
      document.forms[0].mosesQtfield.value = mosesQt;
      document.forms[0].jesusQtfield.value = jesusQt;
      document.forms[0].mosesSubTotal.value = "$" + mosesTotal;
      document.forms[0].jesusSubTotal.value = "$" + jesusTotal;
      document.forms[0].total.value = "$" + grandTotal;
    }

    function receipt()
    {
      var newWindow = window.open(windowContents,"results","width=700,height=600");
      var windowContents = newWindow.document.write("<html><head></head><body>" +
        "<h1>Thank You</h1>" + "$" + grandTotal + " will be charged to your " +
        document.forms[0].creditCard.value + " card." + "<br>Expiration Date: " +
        document.forms[0].expDate.value + "<p><b>Your order will be sent to:</b><br>" +
        document.forms[0].firstName.value + " " + document.forms[0].lastName.value + "<br>" +
        document.forms[0].address.value + " Apt #" + document.forms[0].apt.value + "<br>" +
        document.forms[0].city.value + " " + document.forms[0].state.value + " " +
        document.forms[0].zip.value + "<br>" + "</body></html>");
      newWindow.focus();
      newWindow.document.close();
    }
  </script>
</head>
```

Initialize variables for both  
mosesPrice and jesusPrice



```

<html>
<head>
  <title>Shopping Cart</title>

  <script type="text/javascript">

    var mosesPrice=12.99;
    var jesusPrice=15.99;

    if (document.cookie != "")
    {
      item1 = document.cookie.split("mosesQt=") [1];
      mosesQt = item1.split(";") [0];

      item2 = document.cookie.split("jesusQt=") [1];
      jesusQt = item2.split(";") [0];
    }

    function addValues()
    {
      mosesTotal = mosesQt * mosesPrice;
      jesusTotal = jesusQt * jesusPrice;
      grandTotal = mosesTotal + jesusTotal;
      document.forms[0].mosesQtfield.value = mosesQt;
      document.forms[0].jesusQtfield.value = jesusQt;
      document.forms[0].mosesSubTotal.value = "$" + mosesTotal;
      document.forms[0].jesusSubTotal.value = "$" + jesusTotal;
      document.forms[0].total.value = "$" + grandTotal;
    }

    function receipt()
    {
      var newWindow = window.open(windowContents,"results","width=700,height=600");
      var windowContents = newWindow.document.write("<html><head></head><body>" +
        "<h1>Thank You</h1>" + "$" + grandTotal + " will be charged to your " +
        document.forms[0].creditCard.value + " card." + "<br>Expiration Date: " +
        document.forms[0].expDate.value + "<p><b>Your order will be sent to:</b><br>" +
        document.forms[0].firstName.value + " " + document.forms[0].lastName.value + "<br>" +
        document.forms[0].address.value + " Apt #" + document.forms[0].apt.value + "<br>" +
        document.forms[0].city.value + " " + document.forms[0].state.value + " " +
        document.forms[0].zip.value + "<br>" + "</body></html>");
      newWindow.focus();
      newWindow.document.close();
    }
  </script>
</head>

```

Read the mosesQt and jesusQt values off the cookie.

Use the split( ) method to get only the numerical portion from the cookie string data

```
<html>
<head>
  <title>Shopping Cart</title>
</head>
<script type="text/javascript">
```

```
  var mosesPrice=12.99;
  var jesusPrice=15.99;
```

```
  if (document.cookie != "")
```

```
  {
    item1 = document.cookie.split("moses");
    mosesQt = item1.split(";")[0];

    item2 = document.cookie.split("jesus");
    jesusQt = item2.split(";")[0];
  }
```

```
  function addValues()
```

```
  {
    mosesTotal = mosesQt * mosesPrice;
    jesusTotal = jesusQt * jesusPrice;
    grandTotal = mosesTotal + jesusTotal;
    document.forms[0].mosesQtfield.value = mosesQt;
    document.forms[0].jesusQtfield.value = jesusQt;
    document.forms[0].mosesSubTotal.value = "$" + mosesTotal;
    document.forms[0].jesusSubTotal.value = "$" + jesusTotal;
    document.forms[0].total.value = "$" + grandTotal;
  }
```

```
  function receipt()
```

```
  {
    var newWindow = window.open(windowContents,"results","width=700,height=600");
    var windowContents = newWindow.document.write("<html><head></head><body>" +
      "<h1>Thank You</h1>" + "$" + grandTotal + " will be charged to your " +
      document.forms[0].creditCard.value + " card." + "<br>Expiration Date: " +
      document.forms[0].expDate.value + "<p><b>Your order will be sent to:</b><br>" +
      document.forms[0].firstName.value + " " + document.forms[0].lastName.value + "<br>" +
      document.forms[0].address.value + " Apt #" + document.forms[0].apt.value + "<br>" +
      document.forms[0].city.value + " " + document.forms[0].state.value + " " +
      document.forms[0].zip.value + "<br>" + "</body></html>");
    newWindow.focus();
    newWindow.document.close();
  }
```

```
</script>
```

```
</head>
```

Define a function addValues( ) to calculate the subtotals and total. Write these values to the correct form fields.



```

<html>
<head>
  <title>Shopping Cart</title>

  <script type="text/javascript">

    var mosesPrice=12.99;
    var jesusPrice=15.99;

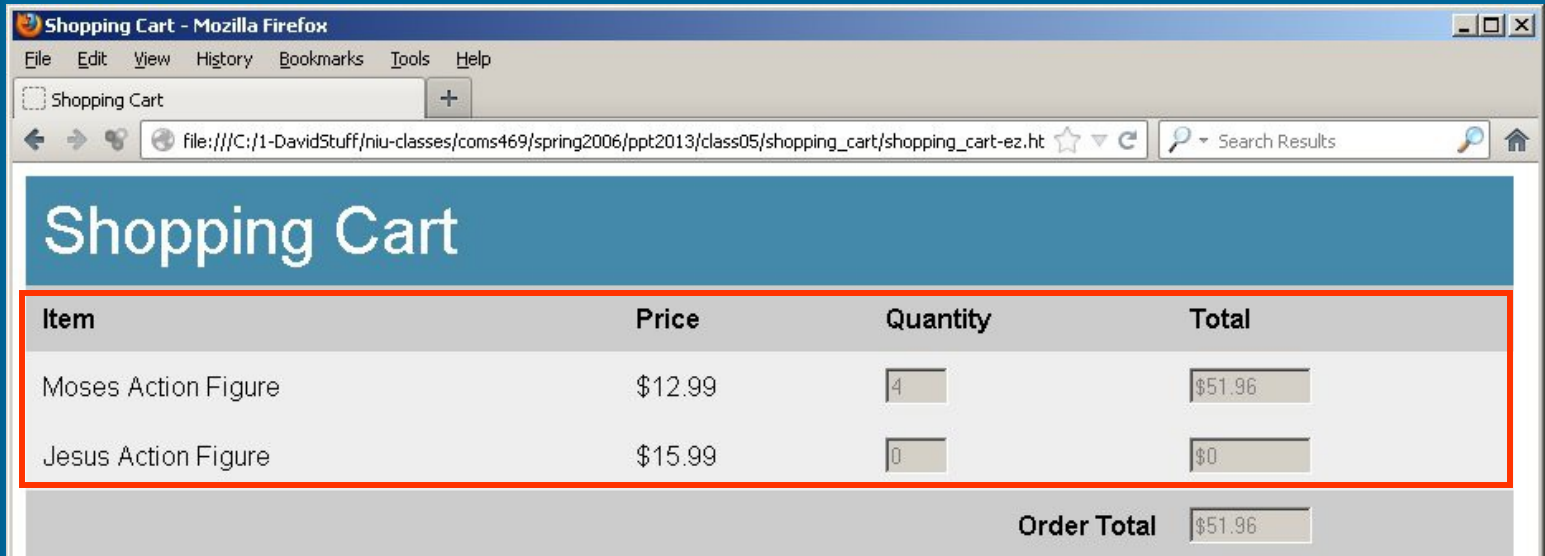
    if (document.cookie != "")
    {
      item1 = document.cookie.split(
      mosesQt = item1.split(";")[0];

      item2 = document.cookie.split(
      jesusQt = item2.split(";")[0];
    }
    function addValues()
    {
      mosesTotal = mosesQt * mosesPr
      jesusTotal = jesusQt * jesusPr
      grandTotal = mosesTotal + jesusTotal;
      document.forms[0].mosesQtfield.value = mosesQt;
      document.forms[0].jesusQtfield.value = jesusQt;
      document.forms[0].mosesSubTotal.value = "$" + mosesTotal;
      document.forms[0].jesusSubTotal.value = "$" + jesusTotal;
      document.forms[0].total.value = "$" + grandTotal;
    }
    function receipt()
    {
      var newWindow = window.open(windowContents,"results","width=700,height=600");
      var windowContents = newWindow.document.write("<html><head></head><body>" +
        "<h1>Thank You</h1>" + "$" + grandTotal + " will be charged to your " +
        document.forms[0].creditCard.value + " card." + "<br>Expiration Date: " +
        document.forms[0].expDate.value + "<p><b>Your order will be sent to:</b><br>" +
        document.forms[0].firstName.value + " " + document.forms[0].lastName.value + "<br>" +
        document.forms[0].address.value + " Apt #" + document.forms[0].apt.value + "<br>" +
        document.forms[0].city.value + " " + document.forms[0].state.value + " " +
        document.forms[0].zip.value + "<br>" + "</body></html>");
      newWindow.focus();
      newWindow.document.close();
    }
  }
</script>
</head>

```

Define a function receipt( ) to write content to a new window

Content of this new window is composed of string data concatenated with values taken from the form



Item	Price	Quantity	Total
Moses Action Figure	\$12.99	4	\$51.96
Jesus Action Figure	\$15.99	0	\$0

Order Total \$51.96

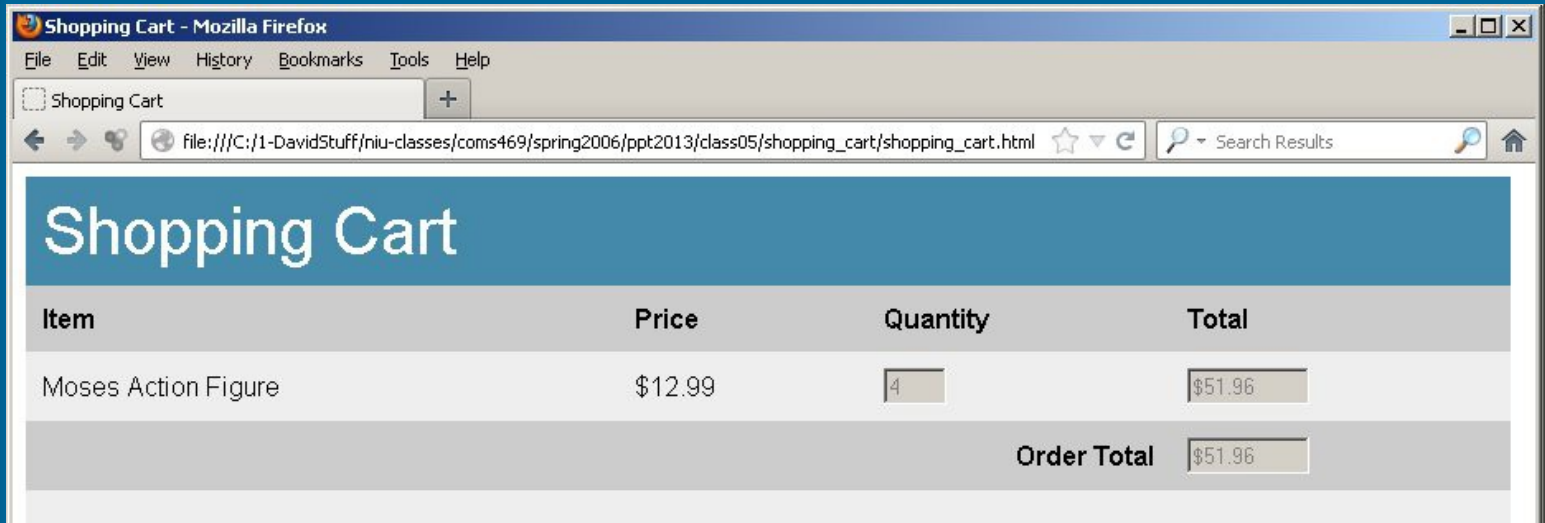
Submit

## Problem

The basic cart shows all items, even those you did not select.

Try to create a cart that only show the items selected.





## Modify Page 2

**<head>** Use a conditional statement in the `addValues( )` function to test which item has a value greater than zero

**<body>** Use a conditional statement to write content to the document

```
<html>
<head>
  <title>Shopping Cart</title>
  <script type="text/javascript">

    var mosesPrice=12.99;
    var jesusPrice=15.99;
    var mosesTotal=0;
    var jesusTotal=0;

    if (document.cookie != "")
    {
      item1 = document.cookie.split("mosesQt=")[1];
      mosesQt = item1.split(";")[0];

      item2 = document.cookie.split("jesusQt=")[1];
      jesusQt = item2.split(";")[0];
    }
    function addValues()
    {
      if (mosesQt != 0)
      {
        mosesTotal = mosesQt * mosesPrice;
        document.forms[0].mosesQtfield.value = mosesQt;
        document.forms[0].mosesSubTotal.value = "$" + mosesTotal;
      }
      if (jesusQt != 0)
      {
        jesusTotal = jesusQt * jesusPrice;
        document.forms[0].jesusQtfield.value = jesusQt;
        document.forms[0].jesusSubTotal.value = "$" + jesusTotal;
      }
      grandTotal = mosesTotal + jesusTotal;
      document.forms[0].total.value = "$" + grandTotal;
    }
    function receipt()
```

Initialize two variables to provide default values for mosesTotal and jesusTotal

```
<html>
<head>
  <title>Shopping Cart</title>
  <script type="text/javascript">
```

```
    var mosesPrice=12.99;
    var jesusPrice=15.99;
    var mosesTotal=0;
    var jesusTotal=0;
```

```
    if (document.cookie != "")
    {
        item1 = document.cookie.split("mosesQt=")[1];
        mosesQt = item1.split(";")[0];

        item2 = document.cookie.split("jesusQt=")[1];
        jesusQt = item2.split(";")[0];
    }
```

```
    function addValues()
    {
        if (mosesQt != 0)
        {
            mosesTotal = mosesQt * mosesPrice;
            document.forms[0].mosesQtfield.value = mosesQt;
            document.forms[0].mosesSubTotal.value = "$" + mosesTotal;
        }
        if (jesusQt != 0)
        {
            jesusTotal = jesusQt * jesusPrice;
            document.forms[0].jesusQtfield.value = jesusQt;
            document.forms[0].jesusSubTotal.value = "$" + jesusTotal;
        }
        grandTotal = mosesTotal + jesusTotal;
        document.forms[0].total.value = "$" + grandTotal;
    }

    function receipt()
```

Modify the addValues( ) function; use a conditional to test whether mosesQt and jesusQt have a value that is not zero.

If the test is successful, then calculate totals for each item and write the results to the form fields



```
<html>
<head>
  <title>Shopping Cart</title>
  <script type="text/javascript">

    var mosesPrice=12.99;
    var jesusPrice=15.99;
    var mosesTotal=0;
    var jesusTotal=0;

    if (document.cookie != "")
    {
      item1 = document.cookie.split("mosesQt=")[1];
      mosesQt = item1.split(";")[0];

      item2 = document.cookie.split("jesusQt=")[1];
      jesusQt = item2.split(";")[0];
    }
    function addValues()
    {
      if (mosesQt != 0)
      {
        mosesTotal = mosesQt * mosesPrice;
        document.forms[0].mosesQtfield.value = mosesQt;
        document.forms[0].mosesSubTotal.value = "$" + mosesTotal;
      }
      if (jesusQt != 0)
      {
        jesusTotal = jesusQt * jesusPrice;
        document.forms[0].jesusQtfield.value = jesusQt;
        document.forms[0].jesusSubTotal.value = "$" + jesusTotal;
      }
      grandTotal = mosesTotal + jesusTotal;
      document.forms[0].total.value = "$" + grandTotal;
    }
    function receipt()
```



```
<body bgcolor="#ffffff" onLoad="addValues()">
```

```
<form>
```

```
  <table border="0" >
```

```
    <tr bgcolor="#4488ff">
```

```
      <td colspan="3">
```

```
    <tr bgcolor="#cccccc">
```

```
      <td><b>Item</b></td>
```

```
      <td><b>Price</b></td>
```

```
      <td><b>Quantity</b></td>
```

```
      <td><b>Total</b></td></tr>
```

Use a conditional statement. If mosesQt is not zero, then use the write( ) method of the document to display the Moses part of the form. If not, then don't include the Moses part. Do the same for Jesus.

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

```
  if (mosesQt != 0)
```

```
  {
```

```
    document.write('<tr bgcolor="#eeeeee"><td>Moses Action Figure</td><td>$12.99</td>' +
```

```
      '<td><input type="text" name="mosesQtfield" size="2" maxlength="2" disabled></td>' +
```

```
      '<td><input type="text" name="mosesSubTotal" size="8" disabled></td></tr>');
```

```
  }
```

```
  if (jesusQt != 0)
```

```
  {
```

```
    document.write('<tr bgcolor="#eeeeee"><td>Jesus Action Figure</td><td>$15.99</td>' +
```

```
      '<td><input type="text" name="jesusQtfield" size="2" maxlength="2" disabled></td>' +
```

```
      '<td><input type="text" name="jesusSubTotal" size="8" disabled></td></tr>');
```

```
  }
```

```
</script>
```

```
  <tr bgcolor="#cccccc">
```

```
    <td colspan="3" align="right"><b>Order Total</b></td>
```

```
    <td><input type="text" name="total" size="8" disabled></td></tr>
```

```
<body bgcolor="#ffffff" onLoad="addValues()">
<form>
  <table border="0" cellspacing="0" cellpadding="10" width="900">
    <tr bgcolor="#4488aa">
      <td colspan="4" style="font-size:40px; color:#ffffff">Shopping Cart</td>
    <tr bgcolor="#cccccc">
      <td><b>Item</b></td>
      <td><b>Price</b></td>
      <td><b>Quantity</b></td>
      <td><b>Total</b></td></tr>

    <script type="text/javascript">
      if (mosesQt != 0)
      {
        document.write('<tr bgcolor="#eeeeee"><td>Moses Action Figure</td><td>$12.99</td>' +
          '<td><input type="text" name="mosesQtfield" size="2" maxlength="2" disabled></td>' +
          '<td><input type="text" name="mosesSubTotal" size="8" disabled></td></tr>');
      }
      if (jesusQt != 0)
      {
        document.write('<tr bgcolor="#eeeeee"><td>Jesus Action Figure</td><td>$15.99</td>' +
          '<td><input type="text" name="jesusQtfield" size="2" maxlength="2" disabled></td>' +
          '<td><input type="text" name="jesusSubTotal" size="8" disabled></td></tr>');
      }
    </script>

    <tr bgcolor="#cccccc">
      <td colspan="3" align="right"><b>Order Total</b></td>
      <td><input type="text" name="total" size="8" disabled></td></tr>
```

Shopping Cart - Mozilla Firefox

File Edit View History Bookmarks Tools Help

Shopping Cart +

file:///C:/1-DavidStuff/niu-classes/coms469/spring2006/ppt2013/class05/shopping\_cart/shopping\_cart.html Search Results

# Shopping Cart

Item	Price	Quantity	Total
Moses Action Figure	\$12.99	<input type="text" value="4"/>	<input type="text" value="\$51.96"/>
Order Total			<input type="text" value="\$51.96"/>

## Shipping and Payment Information

First Name:  Last Name:

Address:  Apt#:

City:  State:  Zip Code:

Credit Card:  Number:  Exp Date:

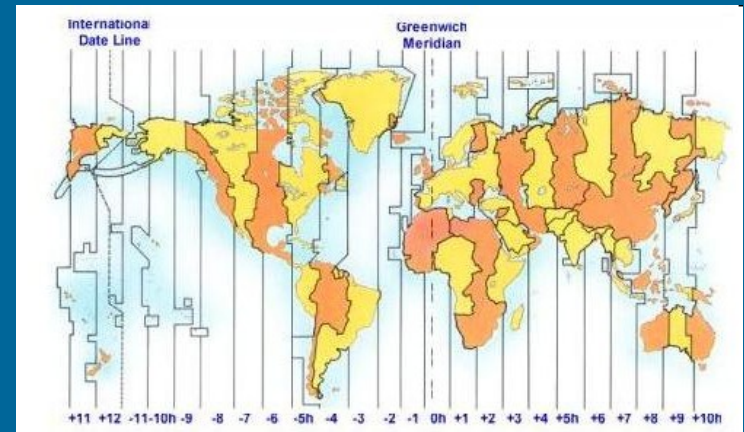


# Time & Timers



# Time & Timers

- Time - Definitions
  - Local Time and Time Zones
  - UTC - Coordinated Universal Time
    - International standard time – Useful for coordinating events irrespective of local time zones
    - *Greenwich Mean Time*



# Time & Timers

- Methods of the Date object
  - toUTCString( )
  - toGMTString( )
  - toLocaleString( )
  - toLocalTimeString( )
  - toTimeString( )
  - toLocaleDateString( )
  - toDateString( )
  - getTimezoneOffset( )



# Time & Times

Set Methods for UTC	Get Methods for UTC
setUTCDate( )	getUTCDate( )
setUTCFullYear( )	getUTCDay( )
setUTCHours( )	getUTCFullYear( )
setUTCMilliseconds( )	getUTCHours( )
setUTCMinutes( )	getUTCMilliseconds( )
setUTCMonth( )	getUTCMinutes( )
setUTCSeconds( )	getUTCMonth( )
	getUTCSeconds( )

```
<html>
<head>
  <title>JavaScript and Time</title>

  <script type="text/javascript">
    var localTime = new Date();
  </script>
</head>
<body>
  <h4>
    <script type="text/javascript">
      document.write("UTC Time is " + localTime.toUTCString() + "<br><br>");

      document.write("Local Date and Time is " + localTime.toLocaleString() + "<br><br>");
      document.write("Time Zone offset is " + localTime.getTimezoneOffset() + "<br><br>");
      document.write("Local Time is " + localTime.toLocaleTimeString() + "<br><br>");
      document.write("Local Time and Time Zone is " + localTime.toString() + "<br><br>");
      document.write("Current Date is " + localTime.toLocaleDateString() + "<br><br>");
      document.write("Abbreviated Date is " + localTime.toDateString() + "<br><br>");

    </script>
  </h4>
</body>
</html>
```

Create a new **Date** object and initialize it to the current date and time based on the client computer's clock.

```
<html>
<head>
  <title>JavaScript and Time</title>

  <script type="text/javascript">
    var localTime = new Date();

  </script>
</head>

<body>
```

A series of document.write() statements. Each one is made up of string literals concatenated with different methods of the Date object applied to the new Date object localTime.

```
  <h4>
  <script type="text/javascript">
    document.write("UTC Time is " + localTime.toUTCString() + "<br><br>");

    document.write("Local Date and Time is " + localTime.toLocaleString() + "<br><br>");
    document.write("Time Zone offset is " + localTime.getTimezoneOffset() + "<br><br>");
    document.write("Local Time is " + localTime.toLocaleTimeString() + "<br><br>");
    document.write("Local Time and Time Zone is " + localTime.toString() + "<br><br>");
    document.write("Current Date is " + localTime.toLocaleDateString() + "<br><br>");
    document.write("Abbreviated Date is " + localTime.toDateString() + "<br><br>");

  </script>
  </h4>

</body>
</html>
```



## time\_methods - Notepad

File Edit Format View Help

```
<html>
<head>
  <title>JavaScript and Time</title>

  <script type="text/javascript">

    var localTime = new Date();

  </script>
</head>
<body>

  <h4>
  <script type="text/javascript">
    document.write("UTC Time is " + localTime.toUTCString() + "<br><br>");

    document.write("Local Date and Time is " + localTime.toLocaleString() + "<br><br>");
    document.write("Time Zone offset is " + localTime.getTimezoneOffset() + "<br><br>");
    document.write("Local Time is " + localTime.toLocaleTimeString() + "<br><br>");
    document.write("Local Time and Time Zone is " + localTime.toString() + "<br><br>");
    document.write("Current Date is " + localTime.toLocaleDateString() + "<br><br>");
    document.write("Abbreviated Date is " + localTime.toString() + "<br><br>");

  </script>
  </h4>

</body>
</html>
```

## JavaScript and Time - Mozilla Firefox

File Edit View History Bookmarks Tools Help

file:///E:/niu-classes/coms469/ppt2t Google

UTC Time is Wed, 04 Feb 2009 21:28:12 GMT

Local Date and Time is Wednesday, February 04, 2009 3:28:12 PM

Time Zone offset is 360

Local Time is 3:28:12 PM

Local Time and Time Zone is 15:28:12 GMT-0600 (Central Standard Time)

Current Date is Wednesday, February 04, 2009

Abbreviated Date is Wed Feb 04 2009

Done

# Time & Timers

- Timers
  - JavaScript code for dealing with elapsed time
  - Used to fire up some line of code at a particular time or time interval



# Time & Timers

- Methods of the window object
  - setTimeout( ) & clearTimeout( )

```
myTimer = window.setTimeout("executable code", milliseconds)
```

```
clearTimeout(myTimer);
```

- setInterval( ) & clearInterval( )

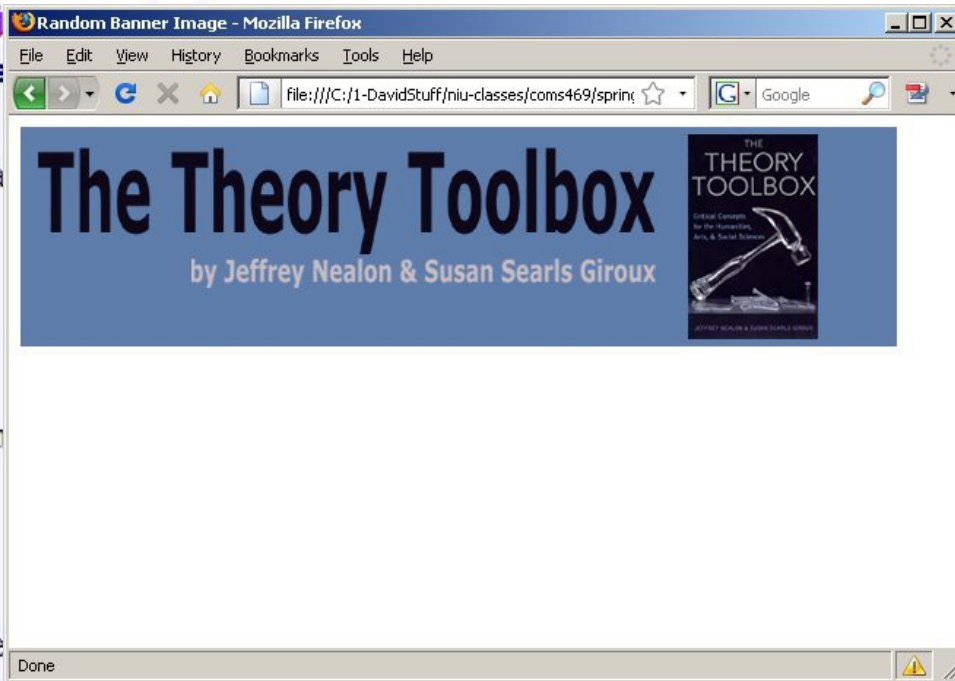
```
myTimer = window.setInterval("executable code", milliseconds)
```

```
clearInterval(myTimer);
```



# Modify random\_image.html

```
1 <html>
2 <head>
3   <title>Cycling Banner Image</title>
4
5   <script type="text/javascript">
6     var adImages = new Array(
7     var thisAd = 0
8     var imgCt = adImages.length
9
10    function rotate()
11    {
12      thisAd++
13      if (thisAd == imgCt)
14      {
15        thisAd = 0
16      }
17      document.adBanner.src = adImages[thisAd] + ".jpg"
18      setTimeout("rotate()", 3 * 1000)
19    }
20  </script>
21 </head>
22 <body bgcolor="#ffffff" onLoad="rotate()">
23   
24 </body>
25 </html>
26
```



```
1 <html>
2 <head>
3   <title>Cycling Banner Image</title>
4
5   <script type="text/javascript">
6     var adImages = new Array("banner1.jpg","banner2.jpg","banner3.jpg")
7     var thisAd = 0
8     var imgCt = adImages.length
9
10    function rotate()
11    {
12      thisAd++
13      if (thisAd ==
14        {
15          thisAd = 0
16        }
17      document.adBar
18      setTimeout("ro
19    }
20  </script>
21 </head>
22 <body bgcolor="#fff
23   
6     var adImages = new Array
7     var thisAd = 0
8     var imgCt = adImages.length
9
10    function rotate()
11    {
12      thisAd++
13      if (thisAd == imgCt)
14      {
15        thisAd = 0
16      }
17      document.adBanner.src=adImages[thisAd]
18      setTimeout("rotate()", 3 * 1000)
19    }
20  </script>
21 </head>
22 <body bgcolor="#ffffff" onLoad="rotate()">
23   
24 </body>
25 </html>
26
```

## Define a function rotate( ).

When the function is called, increment the value of thisAd by 1.

Then run a conditional test. If the value of thisAd is equal to the value of imageCt (meaning that you have reached the end of the array), then reset the value of thisAd to 0.

Then assign the src of the adBanner object to one of the array elements (determined by the changing numerical value of thisAd).

Finally call the rotate( ) function every 3000 milliseconds, which is 3 seconds.



```
1 <html>
2 <head>
3   <title>Cycling Banner Image</title>
4
5   <script type="text/javascript">
6     var adImages = new Array("banner1.jpg","banner2.jpg","banner3.jpg")
7     var thisAd = 0
8     var imgCt = adImages.length
9
10    function rotate()
11    {
12      thisAd++
13      if (thisAd == imgCt)
14      {
15        thisAd = 0
16      }
17      document.adBanner.src=adImages[thisAd]
18      setTimeout("rotate()",3000)
19    }
20  </script>
21 </head>
22 <body bgcolor="#ffffff" onLoad="rotate()">
23   
24 </body>
25 </html>
26
```

## Call the Function

Use the onLoad event handler to initially call the function, when the page is loaded. Name the image adBanner so that its src can be manipulated by the function.

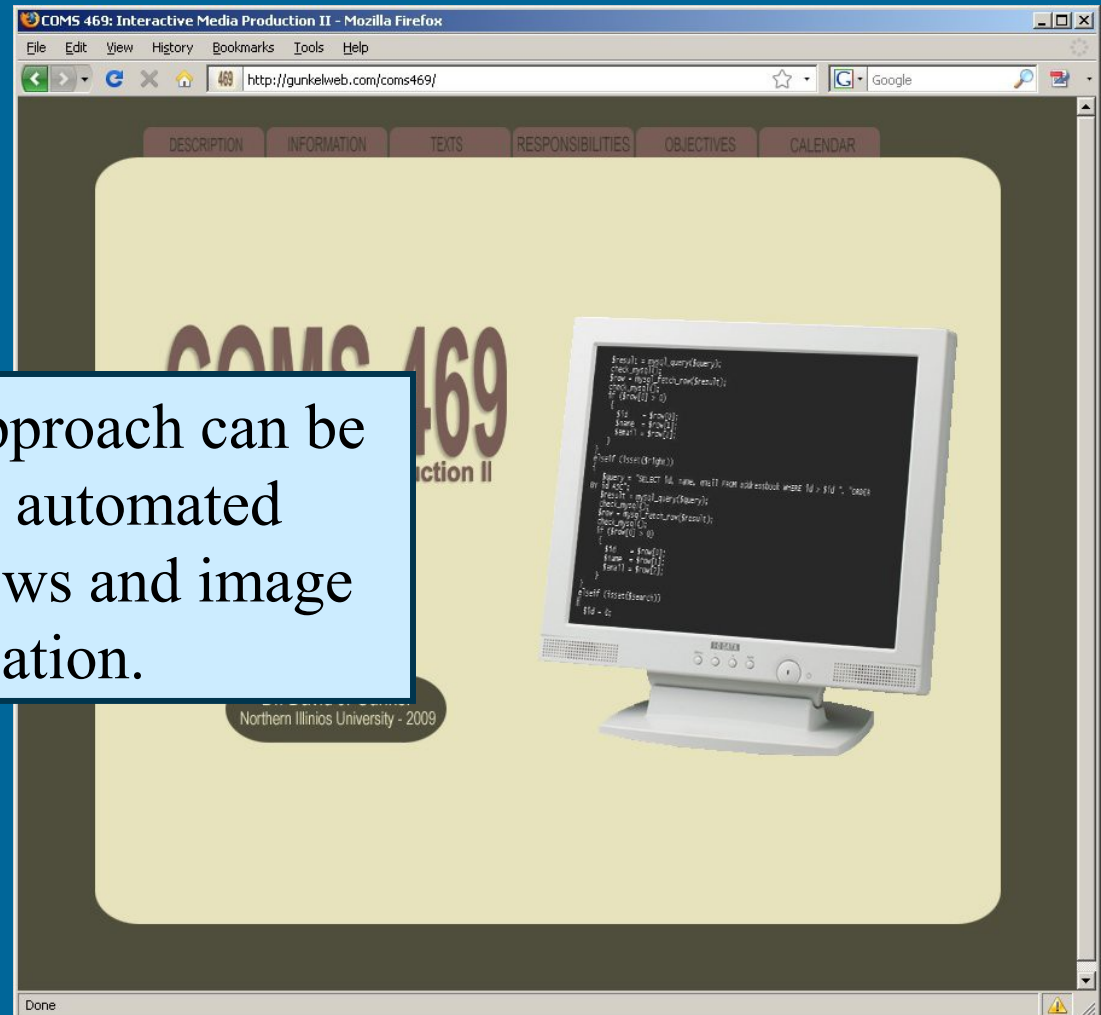
<http://gunkelweb.com/coms469/exercises/banner.html>

```
1 <html>
2 <head>
3   <title>Cycling Banner Image</title>
4
5   <script type="text/javascript">
6     var adImages = new Array("banner1.jpg","banner2.jpg","banner3.jpg")
7     var thisAd = 0
8     var imgCt = adImages.length
9
10    function rotate()
11    {
12      thisAd++
13      if (thisAd == imgCt)
14      {
15        thisAd = 0
16      }
17      document.adBanner.src=adImages[thisAd]
18      setTimeout("rotate()",3 * 1000)
19    }
20  </script>
21 </head>
22 <body bgcolor="#ffffff" onLoad="rotate()">
23   
24 </body>
25 </html>
26
```

cycling\_banner.html  
Modify random\_image.html

# Time & Timers

Same approach can be used for automated slideshows and image manipulation.





# DHTML

- Introduction
- Image Rollover
- DOM and CSS
- Examples
  - Resizable Font
  - Animation

# DHTML

- Dynamic HTML
  - Combination of HTML, CSS, and JavaScript
  - Dynamically alter web content after it is loaded in the browser window
    - Change appearance of page elements
    - Animation and moving elements
    - Enhancements to site interactivity

# DHTML

- Dynamic HTML
  - Browser incompatibilities
    - *History*: Netscape vs. Microsoft
    - *Outcome*: IE vs. non-IE browsers
  - Event Handlers





# DHTML

```
ie_rollover - Notepad
File Edit Format View Help

<html>
<head>
<title>Image Rollover for MSIE</title>

<script type="text/javascript">

function image_eventHandler()
{
    var sourceElement = window.event.srcElement;
    var eventType = window.event.type;

    if (eventType == "mouseover")
    {
        sourceElement.src = "images/imagelb.jpg";
    }
    if (eventType == "mouseout")
    {
        sourceElement.src = "images/imagela.jpg";
    }
}

</script>

</head>

<body bgcolor="#ffffff">



</body>
</html>
```

MS-IE Rollover

```
firefox_rollover - Notepad
File Edit Format View Help

<html>
<head>
<title>Image Rollover for Everything Else</title>

<script type="text/javascript">

function image_eventHandler(evt)
{
    var eventTarget = evt.target;
    var eventType = evt.type;

    if (eventType == "mouseover")
    {
        eventTarget.src = "images/imagelb.jpg";
    }
    if (eventType == "mouseout")
    {
        eventTarget.src = "images/imagela.jpg";
    }
}

</script>

</head>

<body bgcolor="#ffffff">

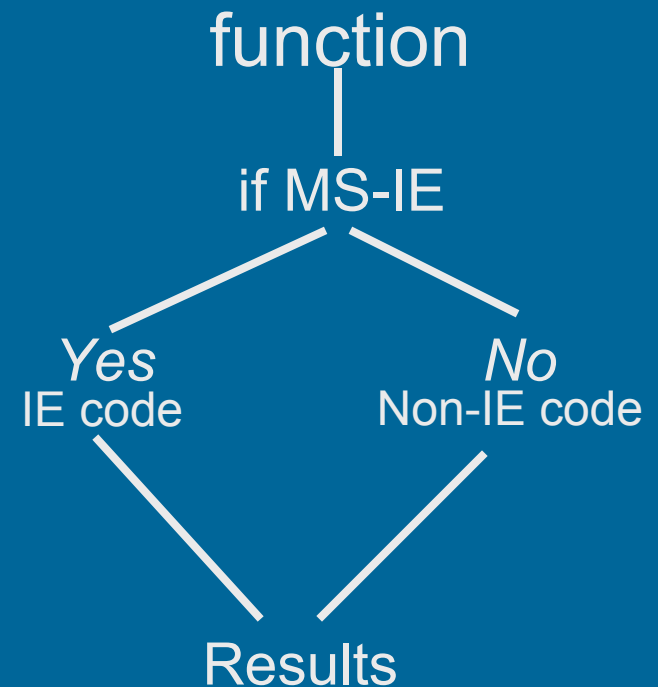


</body>
</html>
```

Firefox Rollover

# DHTML

- Approaches
  - *Code Branching*
    - Use browser detection
    - Provide one set of code for IE and another for non-IE browsers



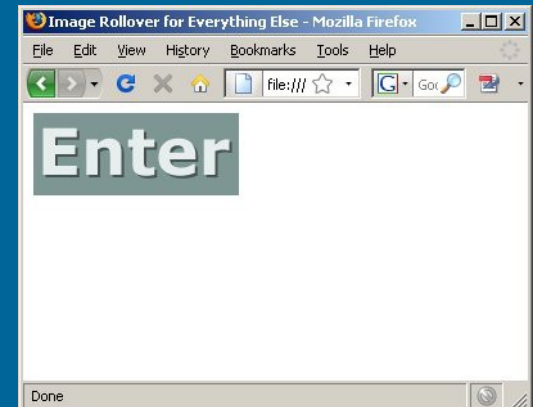
# DHTML

- Approaches
  - Cross Browser DHTML
    - Rely on commonly supported features
    - Only employ those elements that are supported by both IE and non-IE browsers
    - Avoid browser specific DHTML features

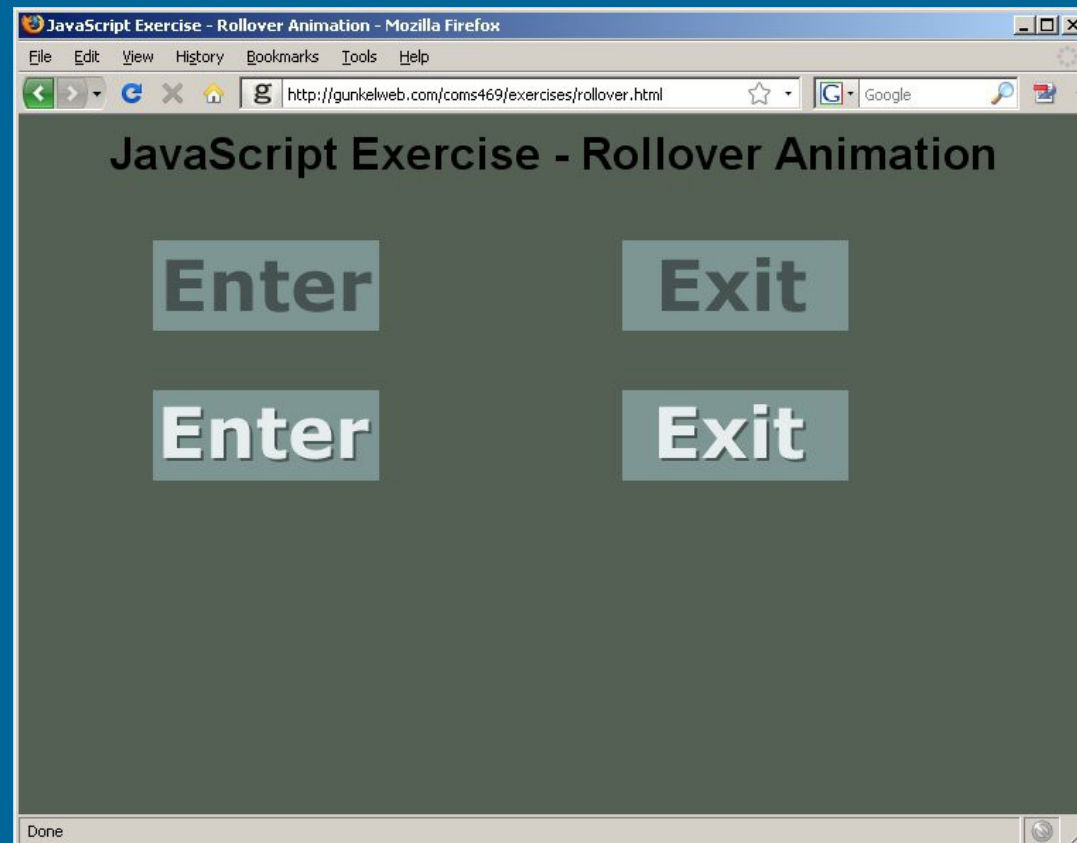


# DHTML

- Example – Image Rollover
  - Cross browser DHTML
  - Common Application
  - Provide user feedback through simple image animation



<http://gunkelweb.com/coms469/exercises/rollover.html>



# basic\_rollover - Notepad

File Edit Format View Help

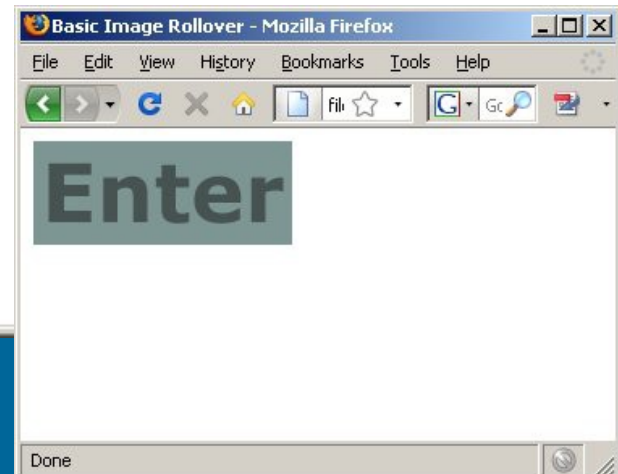
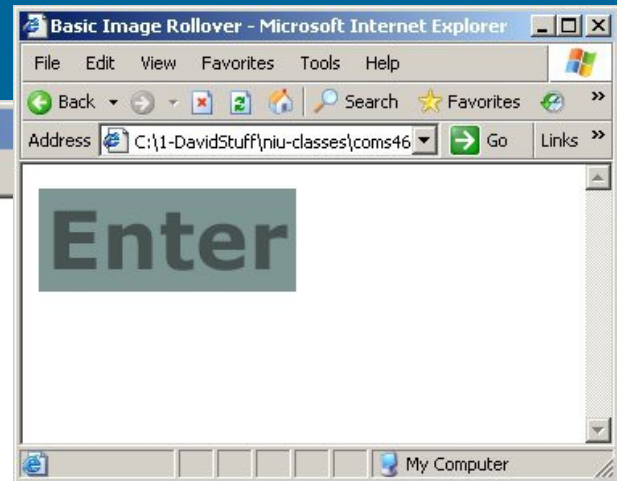
```
<html>
<head>
  <title>Basic Image Rollover</title>
</head>

<body bgcolor="#ffffff">

  <a href="page2.html"
    onmouseover="document.image1.src='images/image1b.jpg'"
    onmouseout ="document.image1.src='images/image1a.jpg'">

    
  </a>

</body>
</html>
```





```
basic_rollover - Notepad
File Edit Format View Help

<html>
<head>
  <title>Basic Image Rollover</title>
</head>

<body bgcolor="#ffffff">

  <a href="page2.html"
    onmouseover="document.image1.src='images/image1b.jpg'"
    onmouseout ="document.image1.src='images/image1a.jpg'">

    
  </a>

</body>
</html>
```

Use the event handlers **onmouseover** and **onmouseout** as attributes of the anchor tag.

When the user places the mouse cursor over the image contained by the anchor tag, **image1b.jpg** is assigned to the **src** of the document element named **image1**. When the user moves the mouse cursor off the image, **image1a.jpg** is assigned to the **src** of the document element named **image1**.

## basic\_rollover.html

basic\_rollover - Notepad

File Edit Format View Help

```
<html>
<head>
  <title>Basic Image Rollover</title>
</head>

<body bgcolor="#ffffff">

  <a href="page2.html"
    onmouseover="document.image1.src='images/image1b.jpg'"
    onmouseout ="document.image1.src='images/image1a.jpg'">

    
  </a>

</body>
</html>
```

**Problem** – Because the images are downloaded at the time of the user event, there can be a delay in the rollover effect.

**Solution** – Preload the images by including some JavaScript in the <head> of the document.

```
<html>
<head>
  <title>Image Rollover with Preload</title>

  <script type="text/javascript">

    var imagela = new Image;
    var imagelb = new Image;

    imagela.src = "images/imagela.jpg";
    imagelb.src = "images/imagelb.jpg";

  </script>

</head>
<body bgcolor="#ffffff">

  <a href="page2.html"
    onmouseover="document.image
    onmouseout ="document.image

  
  </a>

</body>
</html>
```

Create two new instances of the Image object. Assign one to the variable image1a and the other to image1b.

Assign values to the src property of these variables, which in this case will be image file names.



```
<html>
<head>
  <title>Image Rollover with Preload</title>
```

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

```
    var imagela = new Image;
```

```
    var image1b = new Image;
```

```
    imagela.src = "images/imagela.jpg";
```

```
    image1b.src = "im
```

```
  </script>
```

```
</head>
```

```
<body bgcolor="#ffffff"
```

```
  <a href="page2.html"
```

```
    onmouseover="document.image1.src=image1b.src"
```

```
    onmouseout ="document.image1.src=imagela.src">
```

```
  
```

```
</a>
```

```
</body>
```

```
</html>
```

Modify the event handlers. When the user rolls over the image, assign the src property of the Image object image1b to the src property of the document element named image1. Do the inverse when the mouse cursor is moved off the image.

preload\_rollover - Notepad

File Edit Format View Help

```
<html>
<head>
  <title>Image Rollover with Preload</title>

  <script type="text/javascript">

    var imagela = new Image;
    var imagelb = new Image;

    imagela.src = "images/imagela.jpg";
    imagelb.src = "images/imagelb.jpg";

  </script>
</head>
<body bgcolor="#ffffff">

  <a href="page2.html"
    onmouseover="document.image1.src=imagelb.src"
    onmouseout ="document.image1.src=imagela.src">

    
  </a>

</body>
</html>
```

preload\_rollover.html

What modifications would be needed to accommodate 2 or more rollovers?

```
<html>
<head>
  <title>Image Rollover with Preload</title>

  <script type="text/javascript">

    var imagela = new Image;
    var image1b = new Image;
    var image2a = new Image;
    var image2b = new Image;

    imagela.src = "images/imagela.jpg";
    image1b.src = "images/image1b.jpg";
    image2a.src = "images/image2a.jpg";
    image2b.src = "images/image2b.jpg";

  </script>
</head>
<body bgcolor="#ffffff">

  <a href="page2.html"
    onmouseover="document.image1.src=image1b.src"
    onmouseout ="document.image1.src=imagela.src">

  </a>

  <a href="page3.html"
    onmouseover="document.image2.src=image2b.src"
    onmouseout ="document.image2.src=image2a.src">

  </a>

</body>
</html>
```

Add additional new Image objects in the <head> Change the name of the new Image object to image2 and assign the other image files to it.

Add a second anchor tag <a> and event handlers in the <body> use the name image2.



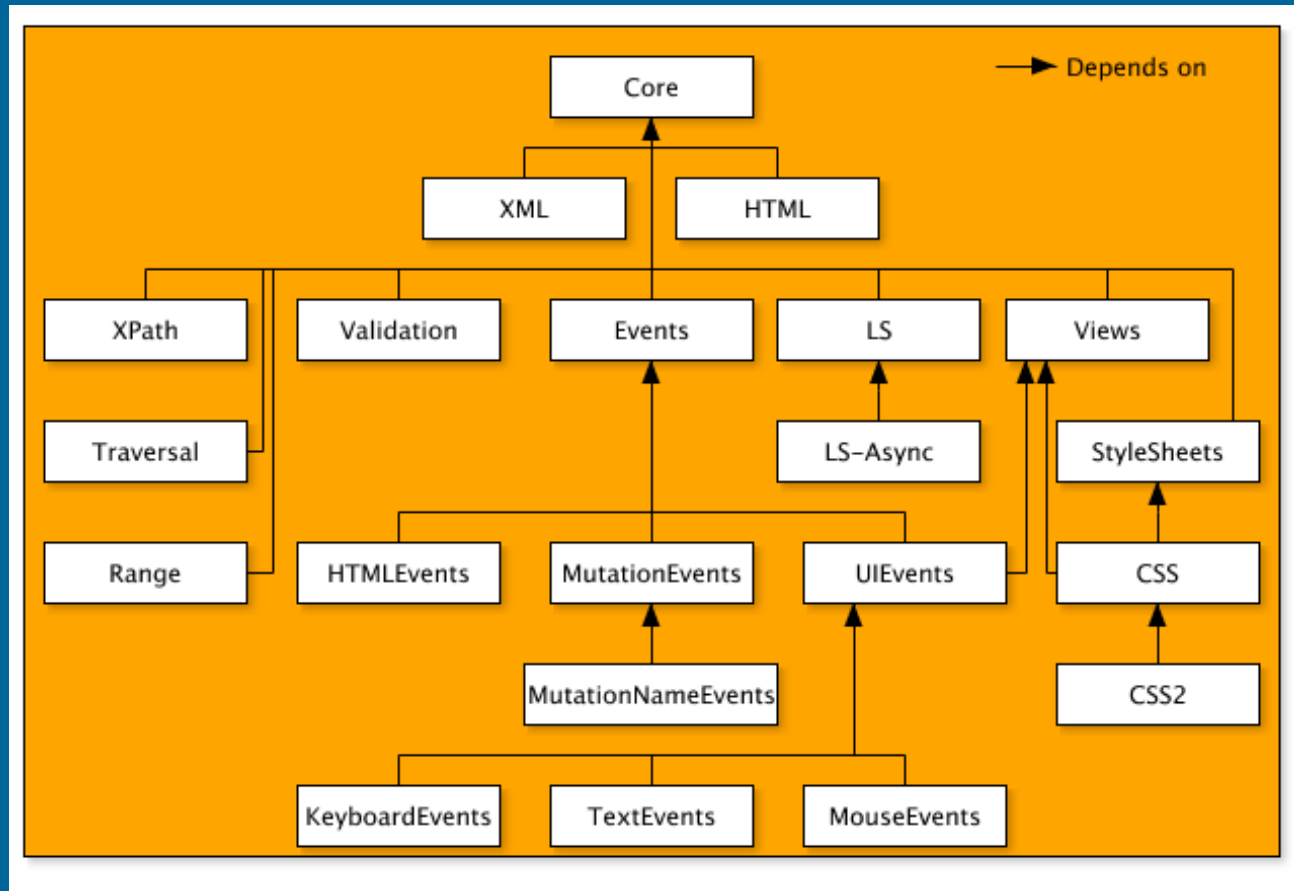
# DHTML

- DOM and CSS
  - DOM – Document Object Model
    - Provide a standard way to identify and access any element in an HTML document
  - CSS – Cascading Style Sheets
    - Provide a standard method for designating the appearance, behavior, and position of an HTML element

# Document Object Model

- Definition/Characterization
  - W3C standard specification
  - Platform and language-neutral interface that allows programs and scripts to dynamically access and update the content, structure and style of web documents.
  - Hierarchical tree structure

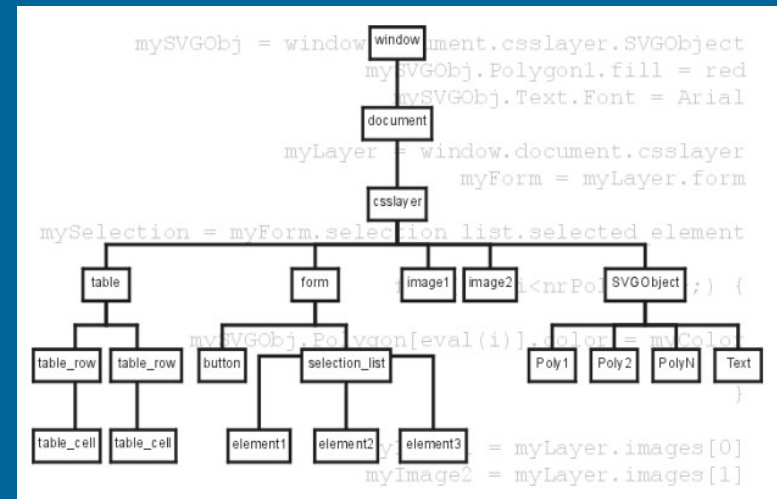
# Document Object Model





# Document Object Model

- DOM vs. BOM
  - Browser Object Model
    - Browser objects
    - Browser specific
  - Document Object Model
    - Web document objects
    - Browser independent



# Document Object Model

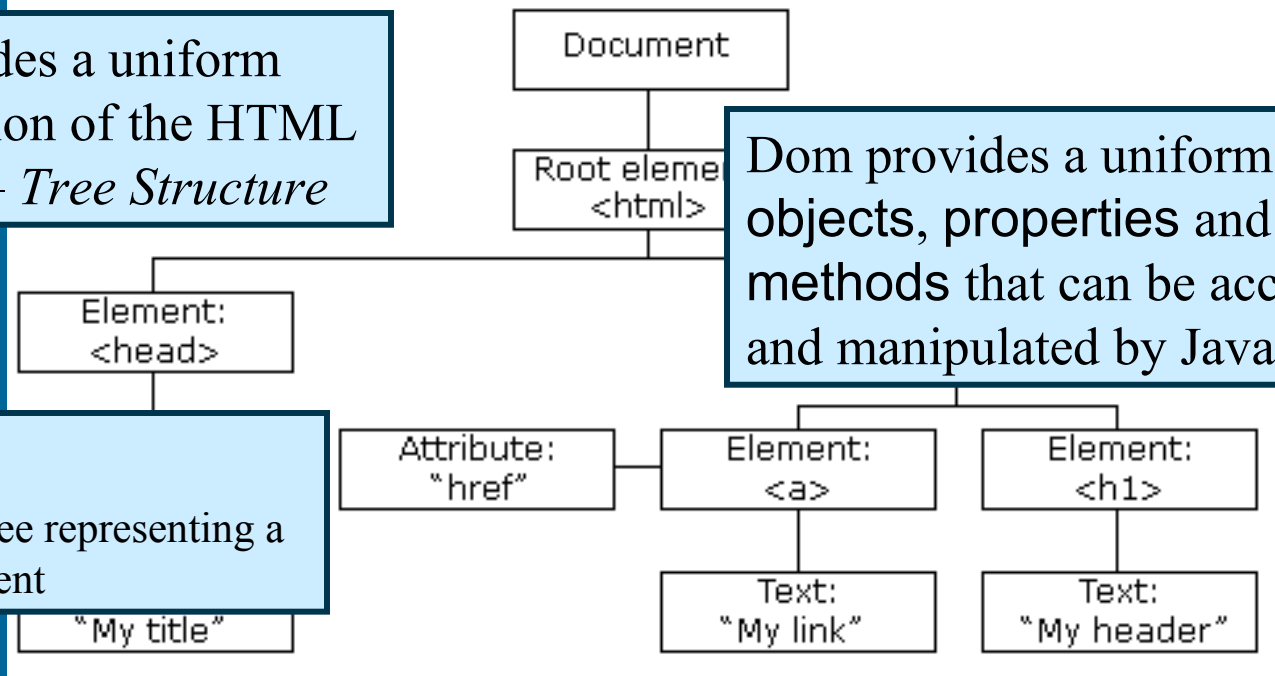
- DOM and JavaScript

Dom provides a uniform representation of the HTML document – *Tree Structure*

Dom provides a uniform set of objects, properties and methods that can be accessed and manipulated by JavaScript

## Node

A box on the tree representing a particular element



```
quiz_form2 - Notepad
File Edit Format View Help

<html>
<head>
<title>Test Yourself</title>
<script type="text/javascript">

    function getScore()
    {
        var score=0;
        if (document.forms[0].elements[1].checked)
        {
            score++;
            document.firstQuestion.src = "images/okay.jpg";
        }
        else
        {
            document.firstQuestion.src = "images/blank.jpg";
        }
        if (document.forms[0].elements[2].checked)
        {
            score++;
            document.secondQuestion.src = "images/okay.jpg";
        }
        else
        {
            document.secondQuestion.src = "images/blank.jpg";
        }

        document.forms[0].theScore.value = Math.round(score/2*100) + "%";
    }

    function clearImage()
    {
        document.firstQuestion.src = "images/blank.jpg";
        document.secondQuestion.src = "images/blank.jpg";
    }

</script>
</head>
```

We are already using DOM to navigate HTML documents and pin-point various elements. In this line, we use JavaScript to access the second element of the forms array property of the document object. The order and syntax of the statement is something that is specified and controlled by the DOM.



# Document Object Model

- Base DOM Objects

Object	Description
Node	Each node in the document has its own <b>Node</b> object
NodeList	This is a list of <b>Node</b> objects
NamedNodeMap	This provides access by name rather than by index to all the <b>Node</b> objects

# Document Object Model

- High Level DOM Objects

Object	Description
<b>Document</b>	The root node of the document
documentType	The DTD or schema type of the XML document
DocumentFragment	A temporary storage space for parts of the document
EntityReference	A reference to an entity in the XML document
<b>Element</b>	An element in the document
Attr	An attribute of an element in the document
ProcessingInstruction	A processing instruction
Comment	A comment in an XML or HTML document
Text	Text that must form a child node of an element
CDATASection	A CDATA section within the XML document
Entity	An unparsed entity in the DTD
Notation	A notation declared within a DTD

# Document Object Model

- Methods of the document object

Method	Description
<code>getElementById(<i>idvalue</i>)</code>	Returns a reference (a node) to an element, when supplied with the value of the id attribute of that element
<code>getElementsByTagName(<i>tagname</i>)</code>	Returns a reference (a node list) to a set of elements that have the same tag as the one supplied in the argument.
<code>createElement(<i>elementName</i>)</code>	Creates an element node with a specified name. Returns the created element.
<code>createTextNode(<i>text</i>)</code>	Creates and returns a text node with the specified text.
<code>createAttribute(<i>attributename</i>)</code>	Creates an attribute node with a specified name. Returns the created attribute node.



# Document Object Model

- Methods of the element object

Method	Description
<code>getAttribute(<i>attributename</i>)</code>	Returns the value of an attribute
<code>setAttribute(<i>attributename</i>, <i>value</i>)</code>	Sets the value of an attribute
<code>removeAttribute(<i>attributename</i>)</code>	Removes the value of an attribute and replaces it with the default value

# Document Object Model

- Properties of the document object

Property	Description
Element	Returns a reference to the outermost element of the document (the root element for example is <html> )

- Properties of the element object

Property	Description
tagName	Returns the element tag name

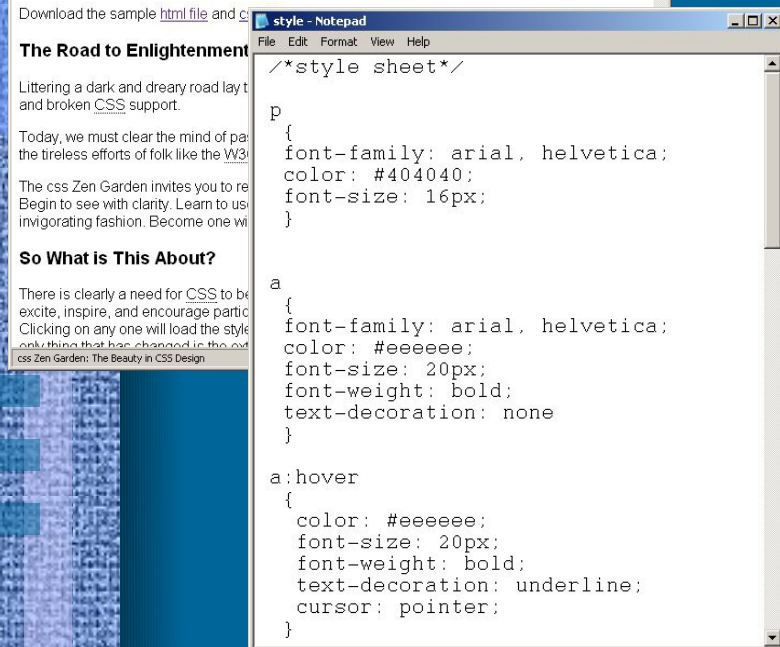
# Cascading Style Sheets

- CSS – Definition & Characteristics
  - CSS is a W3C specified style sheet language that allows web developers to attach style properties (font, color, size, page position, etc.) to HTML document elements
  - CSS effectively separates document style from document content, simplifying authoring and site maintenance.



# Cascading Style Sheets

## Basic HTML document



CSS data

<http://csszengarden.com>

# Cascading Style Sheets

- CSS Syntax

elementName

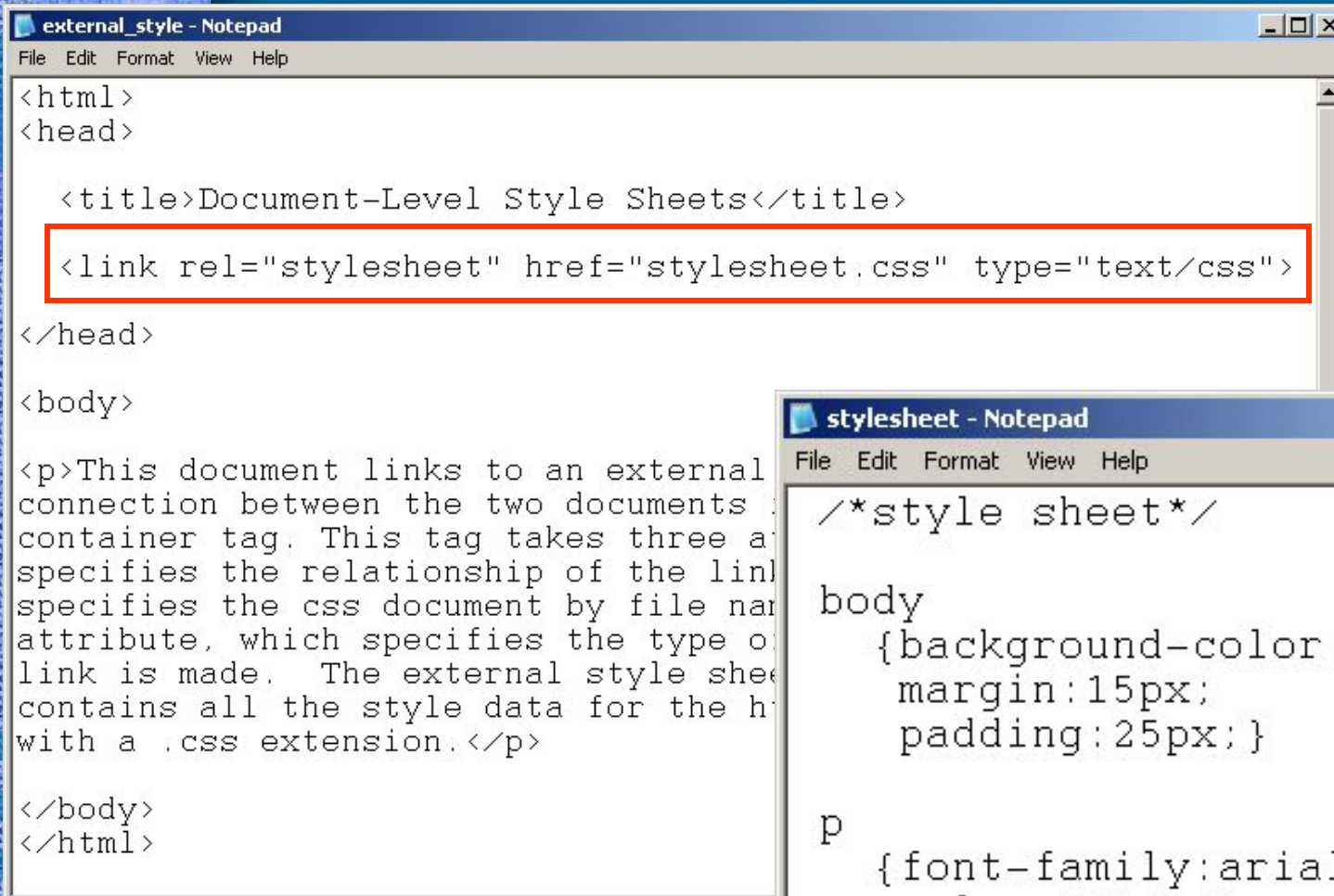
```
{ style-property-name : style property value ;  
  style-property-name : another value ; }
```

p

```
{ font-family: arial;  
  color: #442af1;  
  font-size: 40px; }
```

# CSS Location

## 1) External Style Sheet



```
<html>
<head>

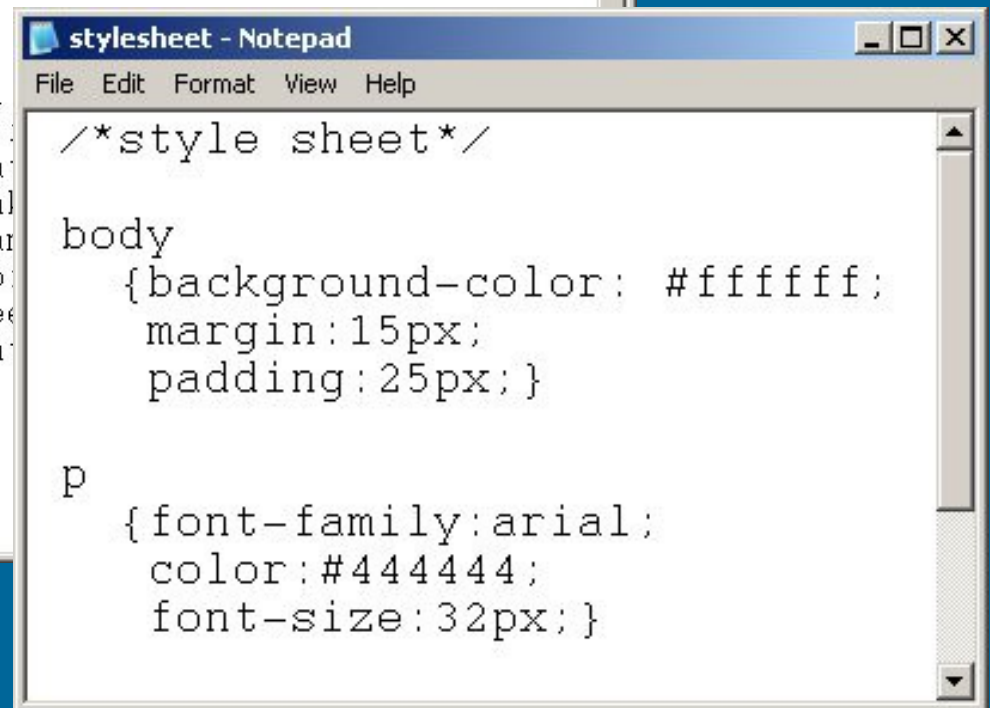
  <title>Document-Level Style Sheets</title>
  <link rel="stylesheet" href="stylesheet.css" type="text/css">

</head>

<body>

<p>This document links to an external
connection between the two documents
container tag. This tag takes three a
specifies the relationship of the lin
specifies the css document by file na
attribute, which specifies the type o
link is made. The external style shee
contains all the style data for the h
with a .css extension.</p>

</body>
</html>
```



```
/*style sheet*/

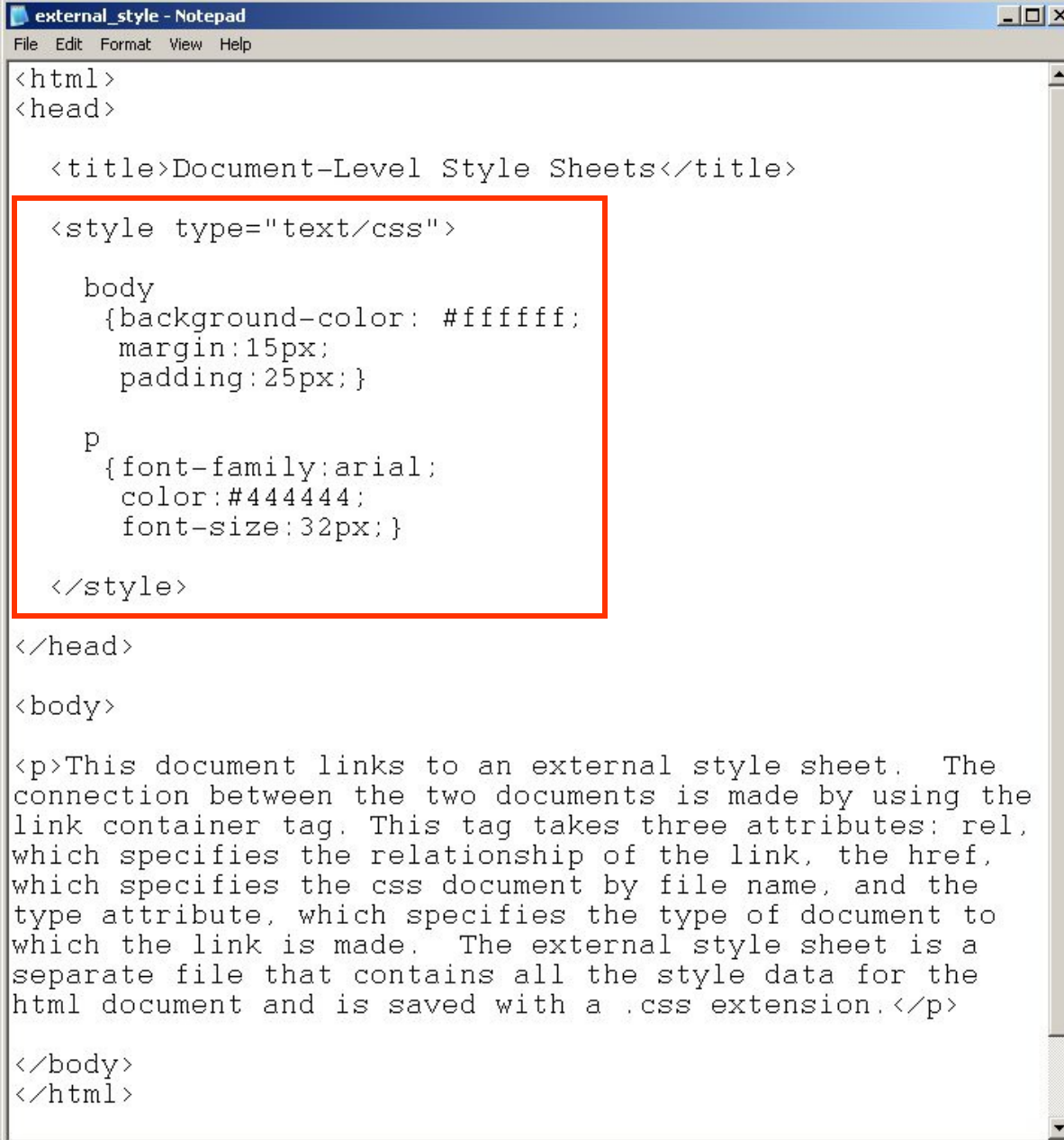
body
{background-color: #ffffff;
margin:15px;
padding:25px;}

p
{font-family:arial;
color:#444444;
font-size:32px;}
```



# CSS Location

## 2) Document-level Style Sheet



```
external_style - Notepad
File Edit Format View Help

<html>
<head>

  <title>Document-Level Style Sheets</title>

  <style type="text/css">

    body
    {background-color: #ffffff;
      margin:15px;
      padding:25px;}

    p
    {font-family:arial;
      color:#444444;
      font-size:32px;}

  </style>

</head>

<body>

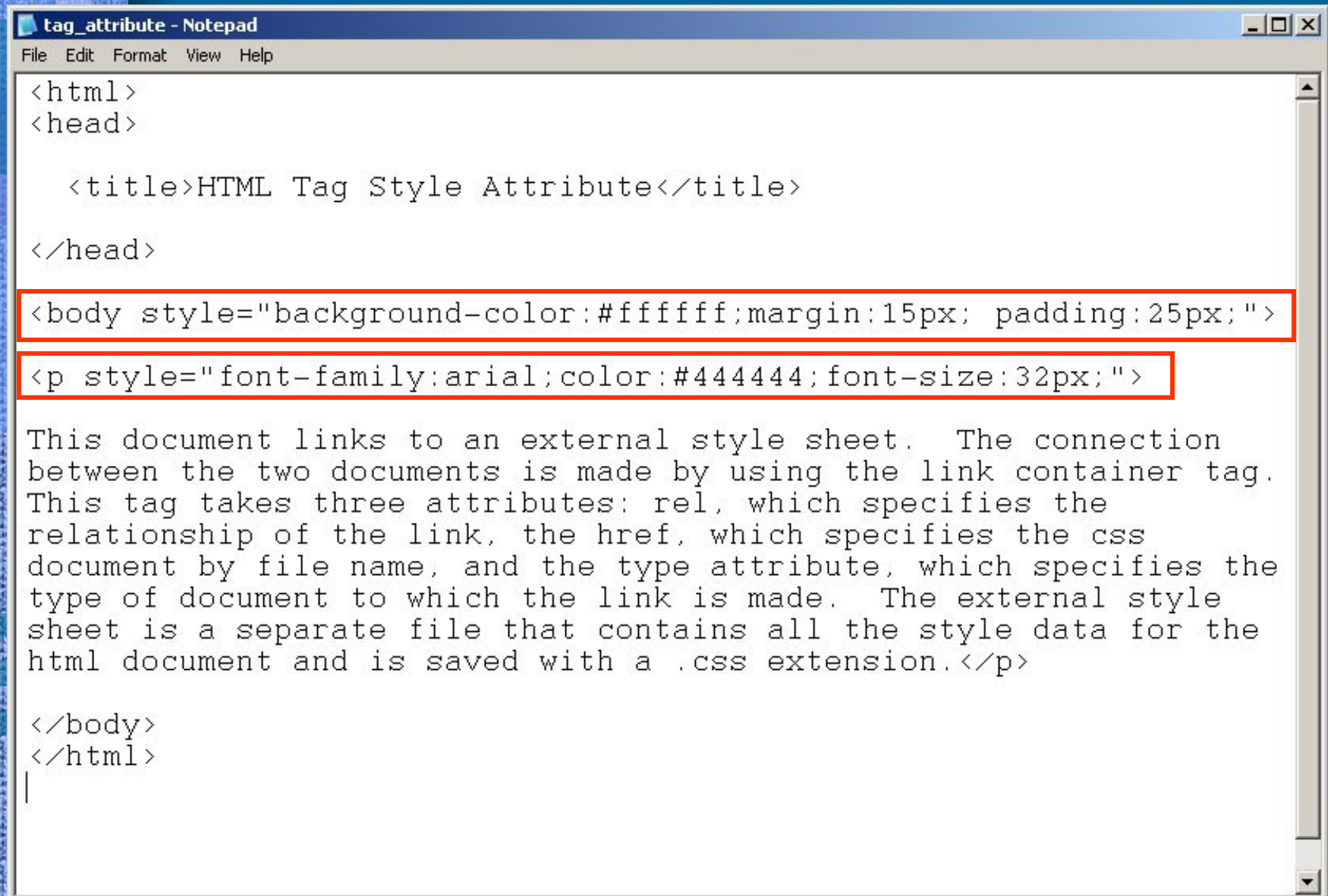
<p>This document links to an external style sheet. The
connection between the two documents is made by using the
link container tag. This tag takes three attributes: rel,
which specifies the relationship of the link, the href,
which specifies the css document by file name, and the
type attribute, which specifies the type of document to
which the link is made. The external style sheet is a
separate file that contains all the style data for the
html document and is saved with a .css extension.</p>

</body>
</html>
```



# CSS Location

## 3) Style Attribute



```
tag_attribute - Notepad
File Edit Format View Help

<html>
<head>

  <title>HTML Tag Style Attribute</title>

</head>

<body style="background-color:#ffffff;margin:15px; padding:25px;">

<p style="font-family:arial;color:#444444;font-size:32px;">

This document links to an external style sheet. The connection
between the two documents is made by using the link container tag.
This tag takes three attributes: rel, which specifies the
relationship of the link, the href, which specifies the css
document by file name, and the type attribute, which specifies the
type of document to which the link is made. The external style
sheet is a separate file that contains all the style data for the
html document and is saved with a .css extension.</p>

</body>
</html>
|
```

# CSS Location

#3

#2

#1

```
mixed_style - Notepad
File Edit Format View Help

<html>
<head>

  <title>Document-Level Style Sheets</title>

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

  <style type="text/css">

    body
    {background-color: #ffffff;
     margin:15px;
     padding:25px;}

    p
    {font-family:arial;
     color:#444444;
     font-size:32px;}

  </style>

</head>

  <body style="border-style:inset;border-color:#222222">

    <p style="background-color:#cccccc">This document links to an
    external style sheet. The connection between the two documents
    is made by using the link container tag. This tag takes three
    attributes: rel, which specifies the relationship of the link,
    the href, which specifies the css document by file name, and the
    type attribute, which specifies the type of document to which the
    link is made. The external style sheet is a separate file that
    contains all the style data for the html document and is saved
    with a .css extension.</p>

  </body>
</html>
```

## Order of Precedence

1<sup>st</sup> – Style Attribute

2<sup>nd</sup> – Document level

3<sup>rd</sup> – External stylesheet

# Cascading Style Sheets

- Class and ID
  - *Class*
    - Allows for the selection of and application of style data to more than one HTML element
    - Indicated on the style sheet by a period; applied by using the **class** attribute in the HTML tag(s)
  - *ID*
    - Selects and applies style data to the element with the specified ID name
    - Indicated on the style sheet by a #; applied by using the **ID** attribute in the HTML tag(s)



```
mixed_style - Notepad
File Edit Format View Help

<html>
<head>

  <title>Document-Level Style Sheets</title>

  <style type="text/css">

    .text
    {font-family:arial;
      color:#444444;}

    #paragraph
    {background-color:#ddddd;
      font-size:32px;}

  </style>
</head>
<body>

<div class="text">

<h1>CSS Information</h1>
<p id="paragraph">This document links to an external style sheet. The
connection between the two documents is made by using the link container
tag. This tag takes three attributes: rel, which specifies the relationship
of the link,the href, which specifies the css document by file name, and
the type attribute, which specifies the type of document to which the link
is made. The external style sheet is a separate file that contains all the
style data for the html document and is saved with a .css extension.</p>

</div>

</body>
</html>
```

## Class

Specify the class name in the CSS with a period. Use this name as the value of the **class** attribute in the `<div>` container tag. This tag marks off a chunk of HTML code and applies the specified style features to all elements contained by this chunk.



```
mixed_style - Notepad
File Edit Format View Help

<html>
<head>

  <title>Document-Level Style Sheets</title>

  <style type="text/css">

    .text
    {font-family:arial;
      color:#444444;}

    #paragraph
    {background-color:#dddddd;
      font-size:32px;}

  </style>

</head>

<body>

<div class="text">

<h1>CSS Information</h1>
<p id="paragraph">This document links to an external style sheet. The
connection between the two documents is made by using the link container
tag. This tag takes three attributes: rel, which specifies the relationship
of the link, the href, which specifies the css document by file name, and
the type attribute, which specifies the type of document to which the link
is made. The external style sheet is a separate file that contains all the
style data for the html document and is saved with a .css extension.</p>

</div>

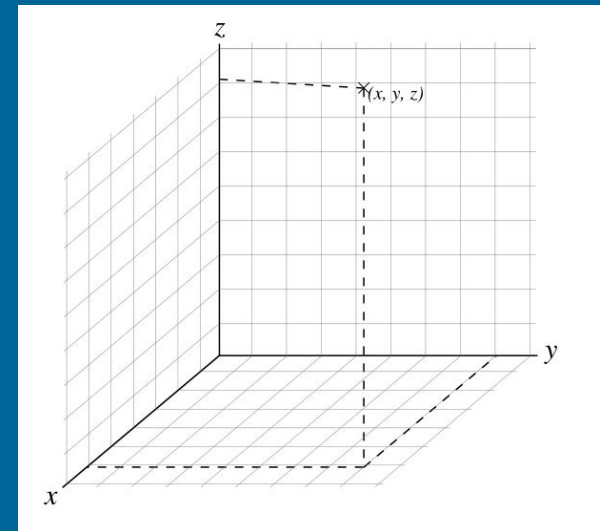
</body>
</html>
```

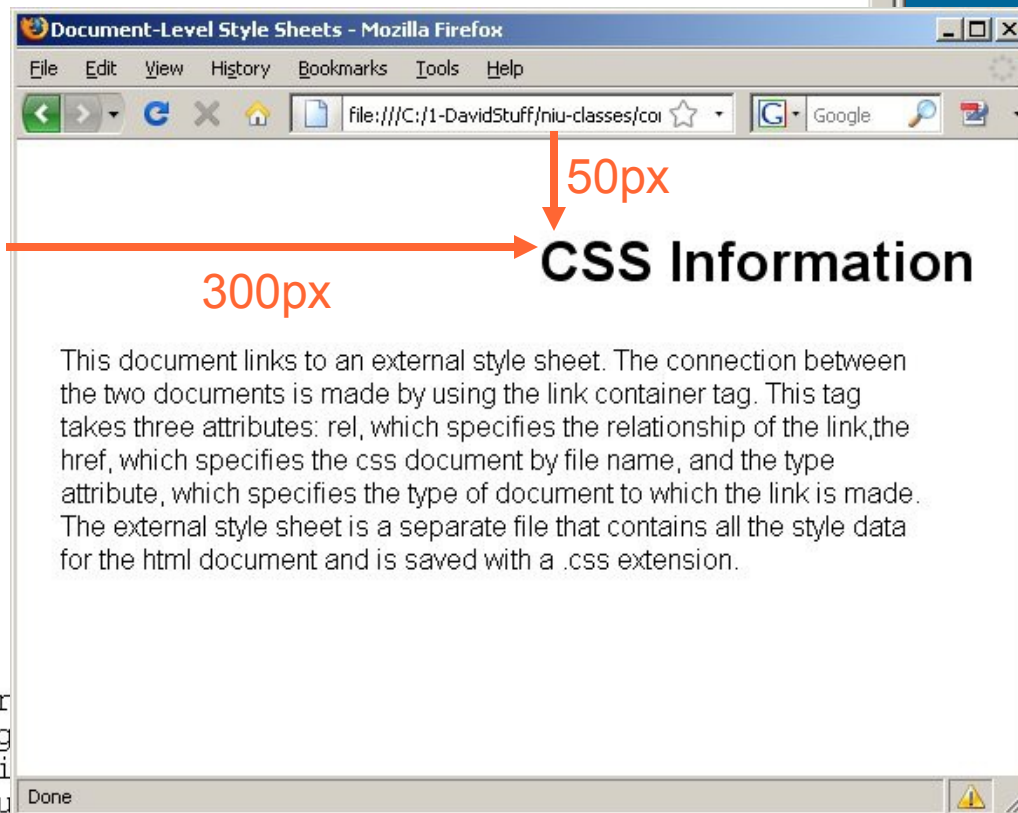
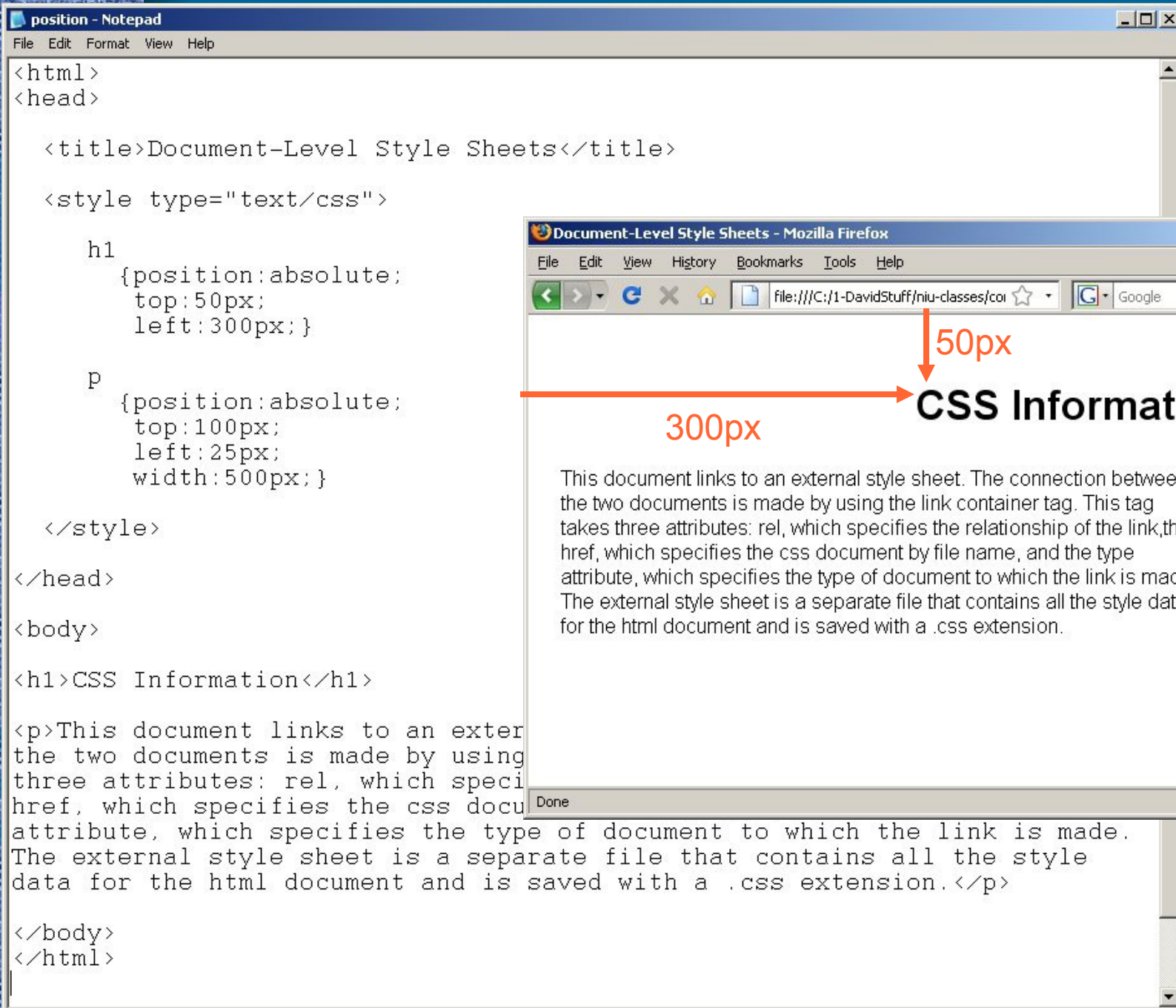
## ID

Specify the id name in the CSS with a #.  
Use this name as the value of the id attribute in one of the HTML tags. This allows you to apply style by specific id name and not by the more general and generic tag name.

# Cascading Style Sheets

- Position
  - Specify the location of an html document element by supplying its  $x$ ,  $y$  and  $z$  coordinates
  - Two methods
    - Relative
      - Relative to its default position
    - Absolute
      - Exact position in the browser window





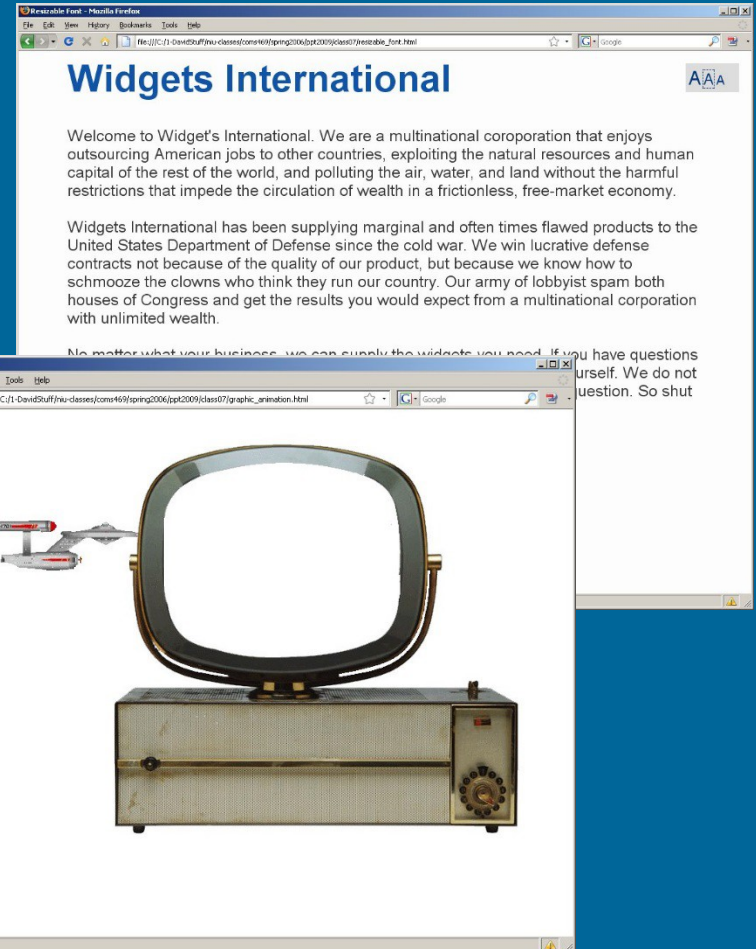
# DHTML – DOM & CSS

- DOM
  - Identifies and provides access to the various html elements of the document object
  - Methods: `getElementById( )`  
`getElementsByTagName( )`
- CSS
  - Apply style to these elements; alter the style
  - Approaches: `style` property  
`class` attribute

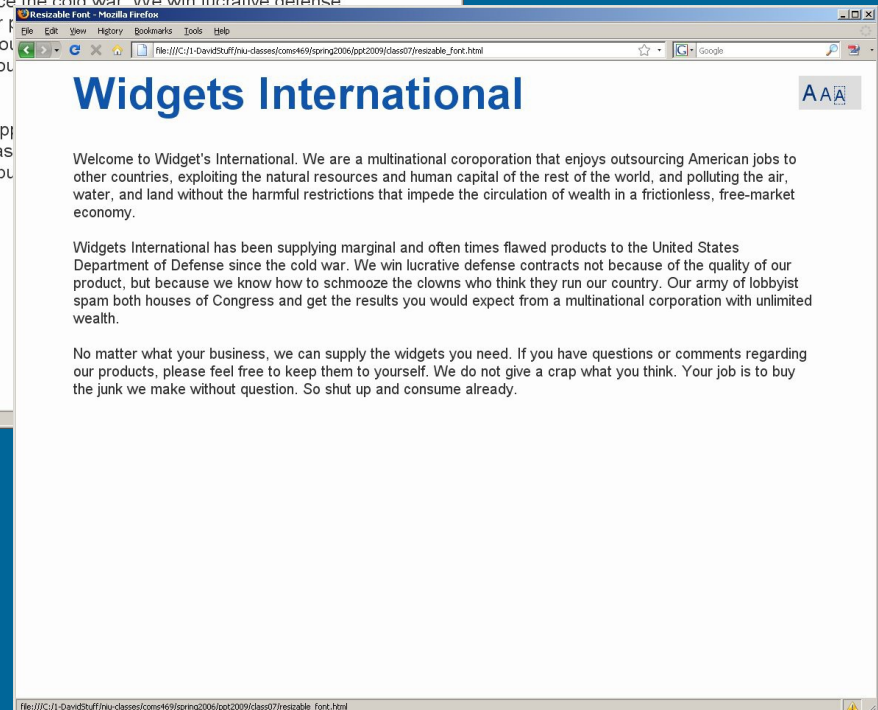
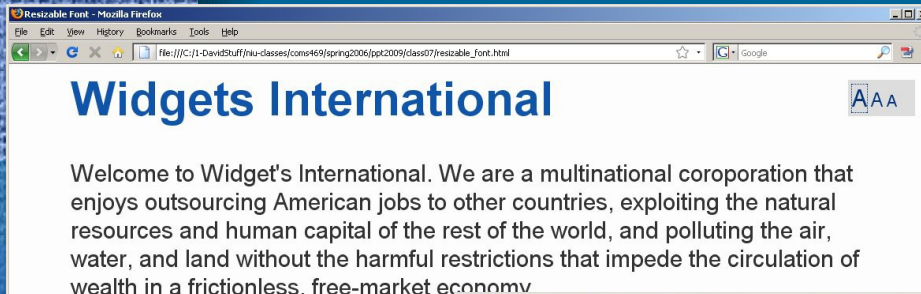


# DHTML – DOM & CSS

- Exercises
  - Resizable Font
  - Animation



# Resizable Font



```
resizable_font - Notepad
File Edit Format View Help

<body bgcolor="#fdfdfd">

<h1 style="font-size:60px;color:#1155aa;font-family:arial;padding-left:70px;">
  Widgets International
</h1>

<div class="toolbar" id=toolbar">
  <a href="" style="font-size:30px" onClick="return largeSize('paragraph')">A</a>
  <a href="" style="font-size:25px" onClick="return mediumSize('paragraph')">A</a>
  <a href="" style="font-size:20px" onClick="return smallSize('paragraph')">A</a>
</div>

<p id="paragraph">Welcome to Widget's International. We are a multinational
corporation that enjoys outsourcing American jobs to other countries, exploiting the
natural resources and human capital of the rest of the world, and polluting the air,
water, and land without a thought for the future. We are a corporation with no
in a frictionless, free market.

<br>Widgets International is a corporation that enjoys outsourcing American jobs to the United States. We are a multinational
corporation that enjoys outsourcing American jobs to other countries, exploiting the
defense contracts not to schmooze the clown houses of Congress and the
corporation with unlimited resources.

<br>No matter what you want, we can do it. We do not ask for anything in return.
questions or comments, we will be happy to help you. We do not ask for anything
yourself. We do not ask for anything without question. So shut up and consume already.</p>

</body>
</html>
```

In the `<body>` include a `<div>` with the class and id assigned to toolbar (the style for this class will be defined in the document `<head>`). Provide three anchor tags. Use the `style` attribute to assign them different font-sizes and an `onClick` event handler to call the functions `largeSize`, `mediumSize` and `smallSize`. These functions have one parameter—the id name `paragraph`.



```
resizable_font - Notepad
File Edit Format View Help

<body bgcolor="#fdfdfd">

<h1 style="font-size:60px;color:#1155aa;font-family:arial;padding-left:70px;">
  Widgets International
</h1>

  <div class="toolbar" id=toolbar">
    <a href="" style="font-size:30px" onClick="return largeSize('paragraph')">A</a>
    <a href="" style="font-size:25px" onClick="return mediumSize('paragraph')">A</a>
    <a href="" style="font-size:20px" onClick="return smallSize('paragraph')">A</a>
  </div>

  <p id="paragraph">Welcome to Widget's International. We are a multinational
  corporation that enjoys outsourcing American jobs to other countries, exploiting the
  natural resources and human capital of the rest of the world, and polluting the air,
  water, and land without the harmful restrictions that impede the circulation of wealth
  in a frictionless, free-market economy.<br>

  <br>Widgets International has been awarded contracts by the United States Department of
  defense contracts not because we are the only ones who can schmooze the clowns who
  houses of Congress and get our corporation with unlimited

  <br>No matter what your business, we can supply the widgets you need. If you have
  questions or comments regarding our products, please feel free to keep them to
  yourself. We do not give a crap what you think. Your job is to buy the junk we make
  without question. So shut up and consume already.</p>

</body>
</html>
```

In the <p> include an id attribute and give it the arbitrary value paragraph. This id name will be used by the getElementById( ) method in the three functions that will be defined in the <head>.



<body>

```
<body bgcolor="#fdfdfd">

<h1 style="font-size:60px;color:#1155aa;font-family:arial;padding-left:70px;">
  Widgets International
</h1>

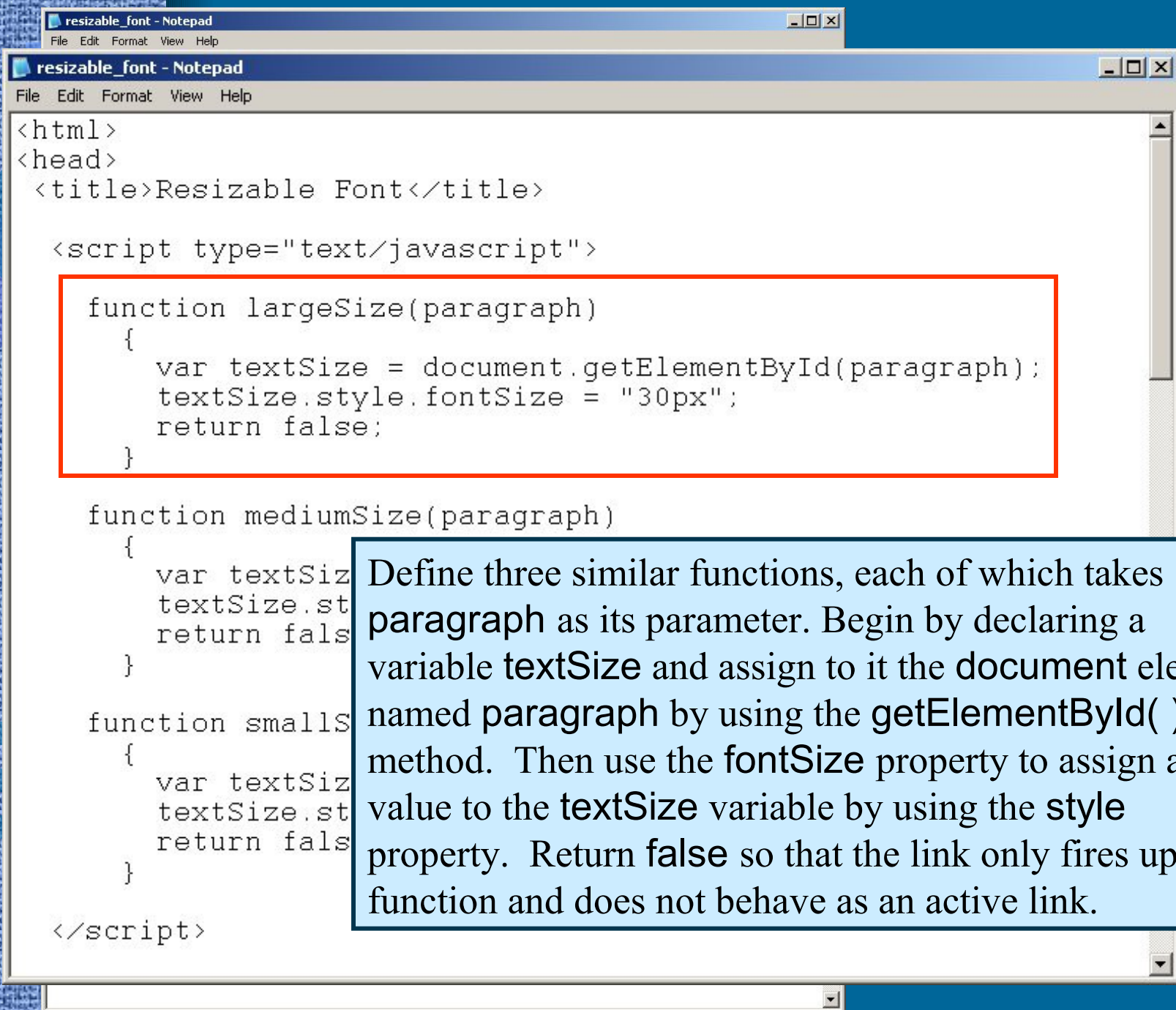
  <div class="toolbar" id=toolbar">
    <a href="" style="font-size:30px" onClick="return largeSize('paragraph')">A</a>
    <a href="" style="font-size:25px" onClick="return mediumSize('paragraph')">A</a>
    <a href="" style="font-size:20px" onClick="return smallSize('paragraph')">A</a>
  </div>

<p id="paragraph">Welcome to Widget's International. We are a multinational
corporation that enjoys outsourcing American jobs to other countries, exploiting the
natural resources and human capital of the rest of the world, and polluting the air,
water, and land without the harmful restrictions that impede the circulation of wealth
in a frictionless, free-market economy.<br>

<br>Widgets International has been supplying marginal and often times flawed products
to the United States Department of Defense since the cold war. We win lucrative
defense contracts not because of the quality of our product, but because we know how
to schmooze the clowns who think they run our country. Our army of lobbyist spam both
houses of Congress and get the results you would expect from a multinational
corporation with unlimited wealth.<br>

<br>No matter what your business, we can supply the widgets you need. If you have
questions or comments regarding our products, please feel free to keep them to
yourself. We do not give a crap what you think. Your job is to buy the junk we make
without question. So shut up and consume already.</p>

</body>
</html>
```



```
<html>
<head>
  <title>Resizable Font</title>

  <script type="text/javascript">

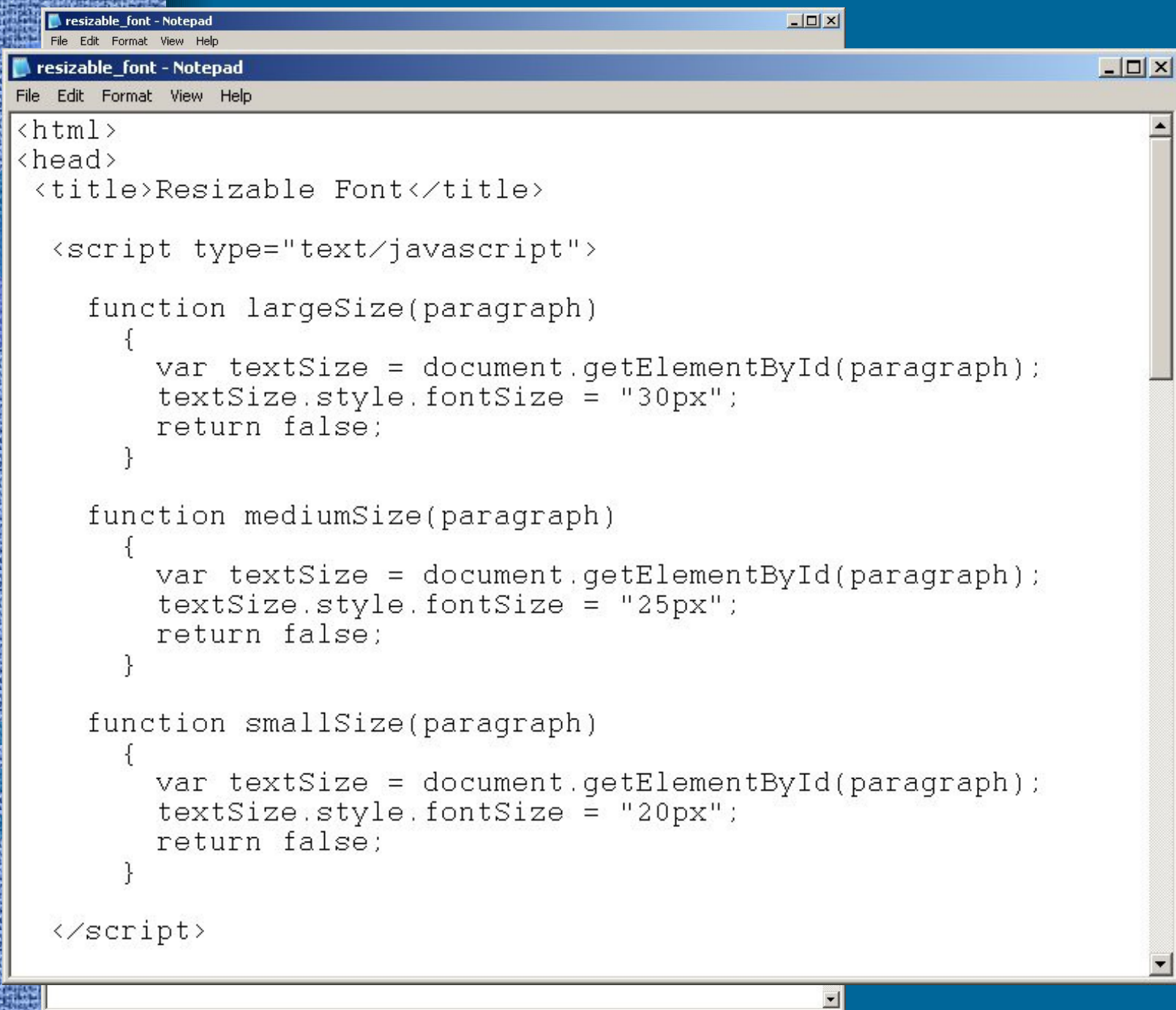
    function largeSize(paragraph)
    {
      var textSize = document.getElementById(paragraph);
      textSize.style.fontSize = "30px";
      return false;
    }

    function mediumSize(paragraph)
    {
      var textSize = document.getElementById(paragraph);
      textSize.style.fontSize = "20px";
      return false;
    }

    function smallSize(paragraph)
    {
      var textSize = document.getElementById(paragraph);
      textSize.style.fontSize = "10px";
      return false;
    }

  </script>
```

Define three similar functions, each of which takes **paragraph** as its parameter. Begin by declaring a variable **textSize** and assign to it the document element named **paragraph** by using the **getElementById( )** method. Then use the **fontSize** property to assign a new value to the **textSize** variable by using the **style** property. Return **false** so that the link only fires up the function and does not behave as an active link.



```
<html>
<head>
  <title>Resizable Font</title>

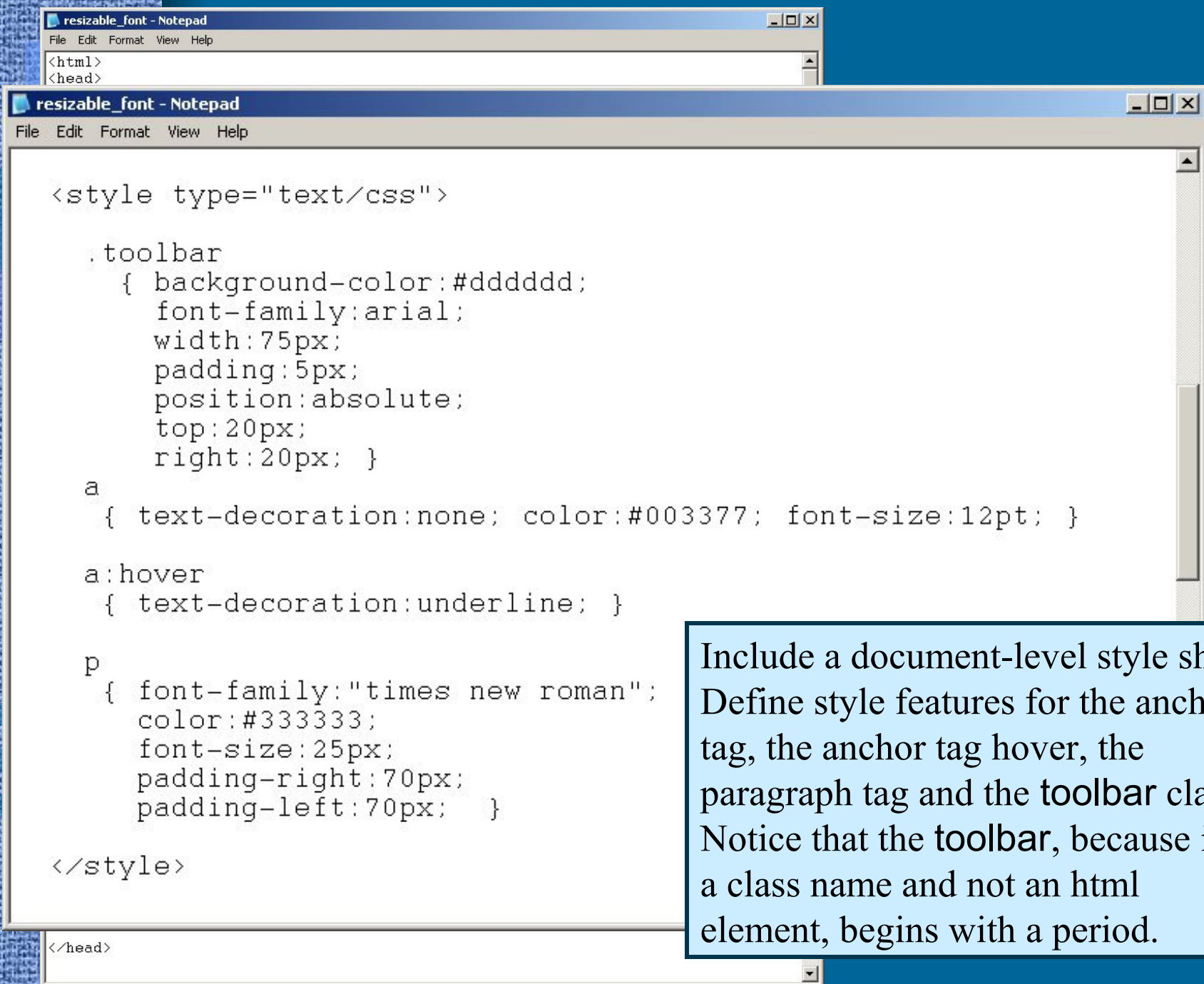
  <script type="text/javascript">

    function largeSize(paragraph)
    {
      var textSize = document.getElementById(paragraph);
      textSize.style.fontSize = "30px";
      return false;
    }

    function mediumSize(paragraph)
    {
      var textSize = document.getElementById(paragraph);
      textSize.style.fontSize = "25px";
      return false;
    }

    function smallSize(paragraph)
    {
      var textSize = document.getElementById(paragraph);
      textSize.style.fontSize = "20px";
      return false;
    }

  </script>
```



```
<html>
<head>

<style type="text/css">

    .toolbar
    { background-color:#dddddd;
      font-family:arial;
      width:75px;
      padding:5px;
      position:absolute;
      top:20px;
      right:20px; }

    a
    { text-decoration:none; color:#003377; font-size:12pt; }

    a:hover
    { text-decoration:underline; }

    p
    { font-family:"times new roman";
      color:#333333;
      font-size:25px;
      padding-right:70px;
      padding-left:70px; }

</style>

</head>
```

Include a document-level style sheet. Define style features for the anchor tag, the anchor tag hover, the paragraph tag and the toolbar class. Notice that the toolbar, because it is a class name and not an html element, begins with a period.



```
<html>
<head>
  <title>Resizable Font</title>

  <script type="text/javascript">

    function largeSize(paragraph)
    {
      var textSize = document.getElementById(paragraph);
      textSize.style.fontSize = "30px";
      return false;
    }

    function mediumSize(paragraph)
    {
      var textSize = document.getElementById(paragraph);
      textSize.style.fontSize = "25px";
      return false;
    }

    function smallSize(paragraph)
    {
      var textSize = document.getElementById(paragraph);
      textSize.style.fontSize = "20px";
      return false;
    }

  </script>

  <style type="text/css">

    .toolbar
    { background-color:#dddddd;
      font-family:arial;
      width:75px;
      padding:5px;
      position:absolute;
      top:20px;
      right:20px; }

    a
    { text-decoration:none; color:#003377; font-size:12pt; }

    a:hover
    { text-decoration:underline; }

    p
    { font-family:"times new roman";
      color:#333333;
      font-size:25px;
      padding-right:70px;
      padding-left:70px; }

  </style>
</head>
```

&lt;head&gt;

resizable\_font.html

## Widgets International

Welcome to Widget's International. We are a multinational corporation that enjoys outsourcing American jobs to other countries, exploiting the natural resources and human capital of the rest of the world, and polluting the air, water, and land without the harmful restrictions that impede the circulation of wealth in a frictionless, free-market economy.

### resizable\_font - Notepad

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```
<html>
<head>
  <title>Resizable Font</title>

  <script type="text/javascript">

    function largeSize(paragraph)
    {
      var textSize = document.getElementById(paragraph);
      textSize.style.fontSize = "30px";
      return false;
    }

    function mediumSize(paragraph)
    {
      var textSize = document.getElementById(paragraph);
      textSize.style.fontSize = "25px";
      return false;
    }

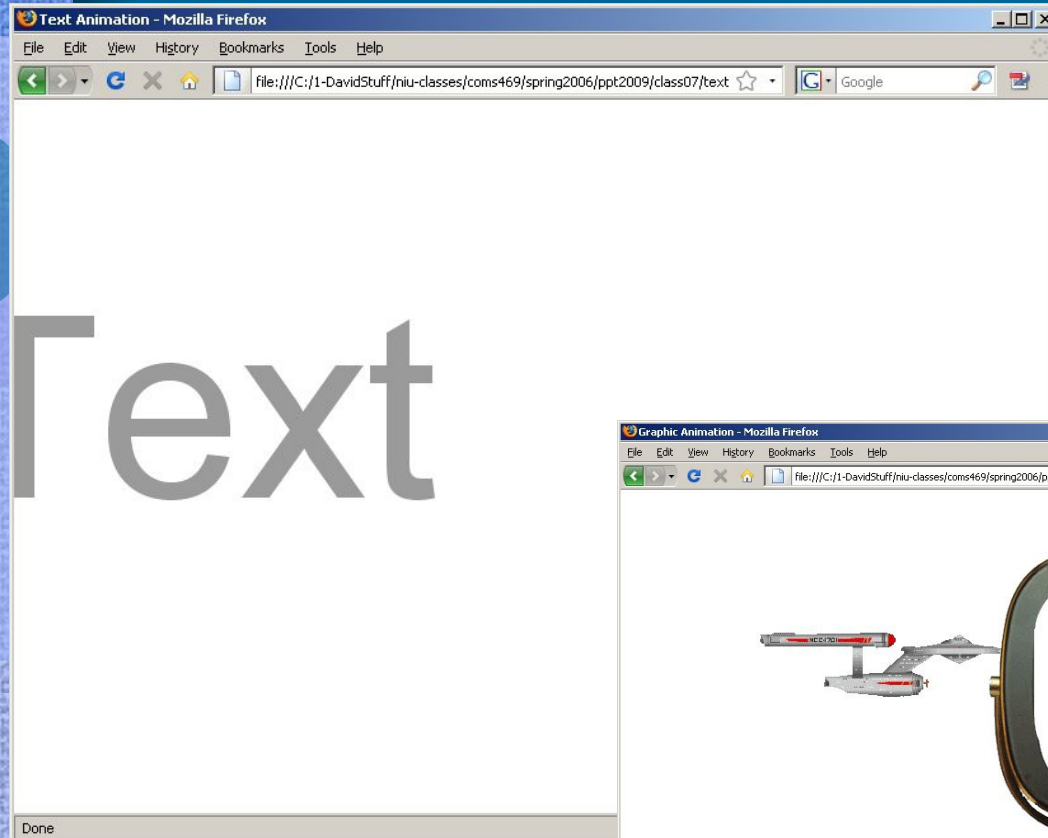
    function smallSize(paragraph)
    {
      var textSize = document.getElem
      textSize.style.fontSize = "20px";
      return false;
    }

  </script>
```

Redundancy. Three functions with the same basic structure and operation.

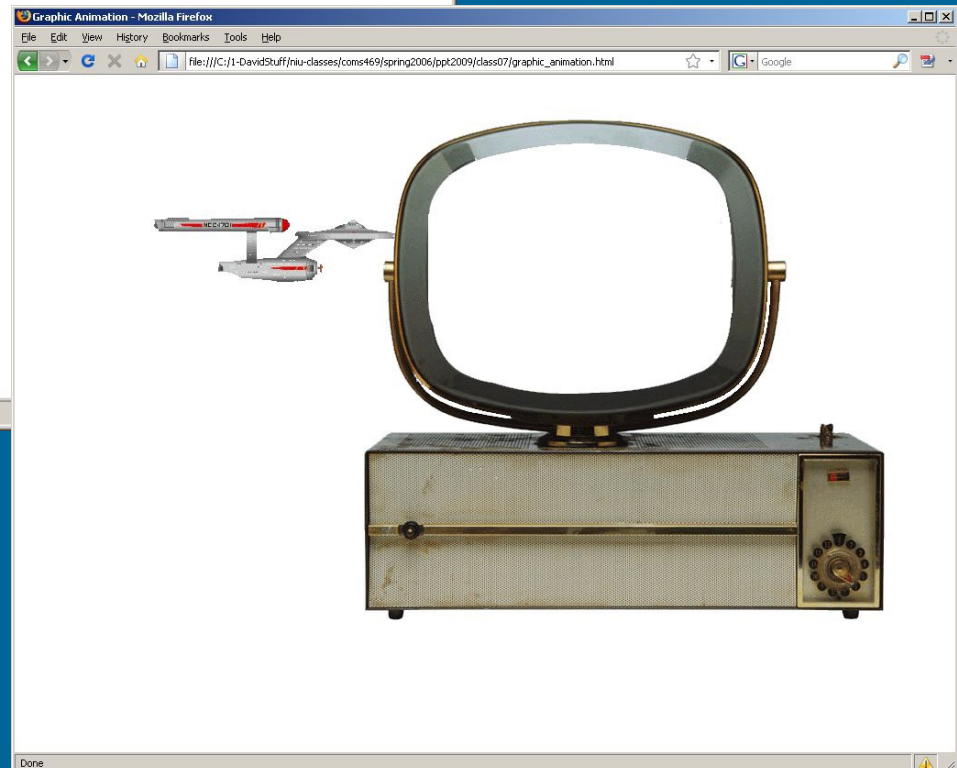
g marginal and often times flawed  
t of Defense since the cold war. We  
use of the quality of our product, but  
clowns who think they run our  
houses of Congress and get the  
onal corporation with unlimited

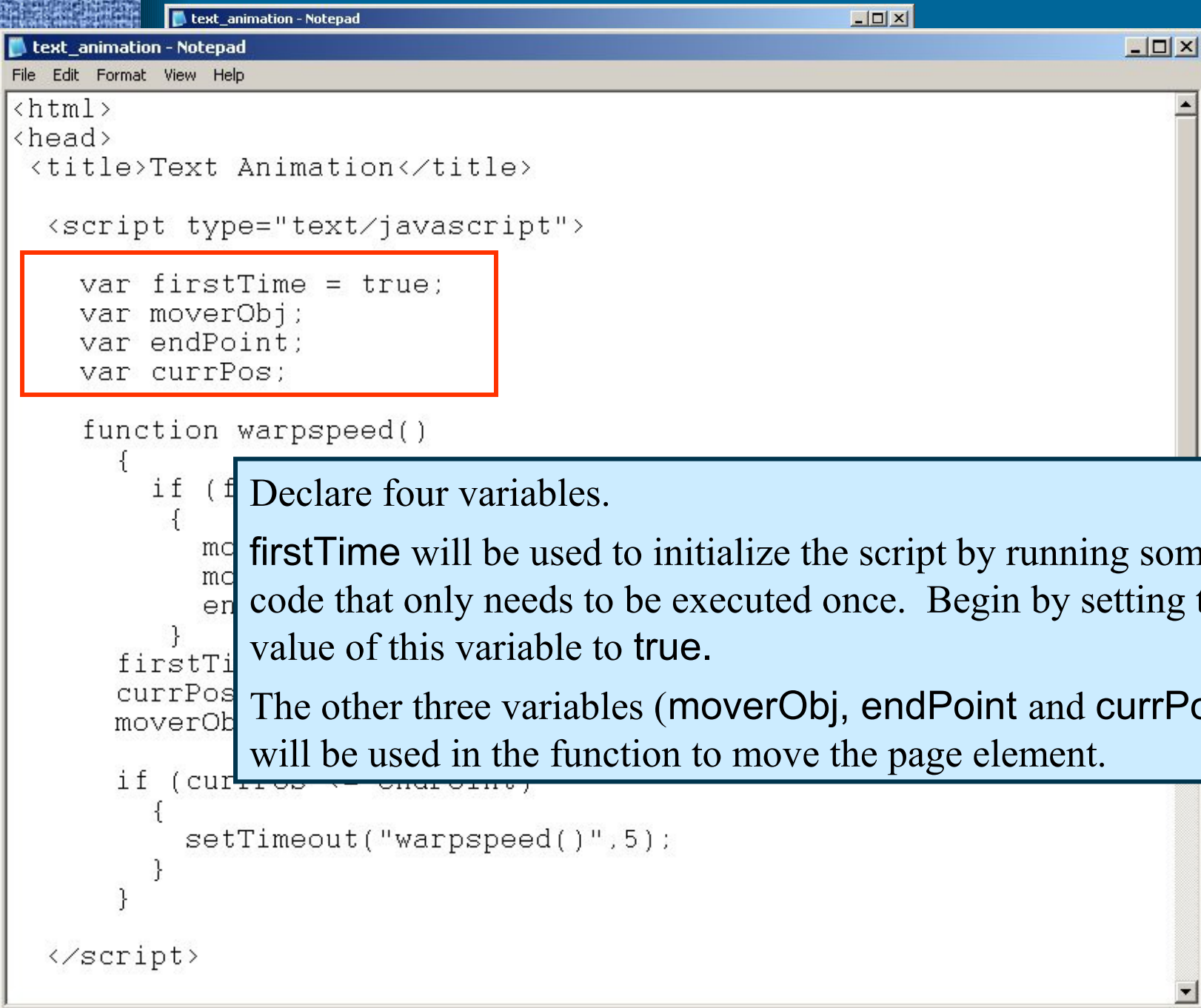
apply the widgets you need. If you  
ur products, please feel free to keep  
what you think. Your job is to buy the  
up and consume already.



Text

Animation





```
<html>
<head>
  <title>Text Animation</title>

  <script type="text/javascript">

    var firstTime = true;
    var moverObj;
    var endPoint;
    var currPos;

    function warpspeed()
    {
      if (firstTime)
      {
        moverObj = document.getElementById("mover");
        currPos = moverObj.offsetTop;
        endPoint = document.getElementById("endPoint").offsetTop;

        firstTime = false;
      }

      if (currPos < endPoint)
      {
        setTimeout("warpspeed()", 5);
      }
    }

  </script>
```

Declare four variables.

**firstTime** will be used to initialize the script by running some code that only needs to be executed once. Begin by setting the value of this variable to true.

The other three variables (**moverObj**, **endPoint** and **currPos**) will be used in the function to move the page element.



```
text_animation - Notepad
text_animation - Notepad
File Edit Format View Help
<html>
<head>
  <title>Text Animation</title>

  <script type="text/javascript">
    Define a function warpspeed( ).
    If firstTime is true, assign the mover element of the
    document object to the moverObj variable by using the
    getElementById( ) method.

    var firstTime = true;
    var moverObj = document.getElementById("mover");
    var endPoint = 1400;
    var currPos = 0;

    function warpspeed()
    {
      if (firstTime)
      {
        moverObj = document.getElementById("mover");
        moverObj.style.left = "-750px";
        endPoint = 1400;
      }
      firstTime = false;
    }

  </script>
</html>
```

Then establish beginning and ending points for the animation. The beginning point is set by assigning a negative number to the left property of the style of the moverObj. This will position the moverObj just outside the left hand edge of the browser window. Then set the value of endPoint to 1400, which is the number of pixels from the left hand edge of the browser window.

```
<html>
<head>
<title>Tex
```

```
<script t
```

```
var fir
var mov
var end
var cur
```

```
function
```

```
{
```

```
  if (firstTime)
```

```
  {
```

```
    moverObj = document.getElementById("mover");
```

```
    moverObj.style.left = "-750px";
```

```
    endPoint = 1400;
```

```
  }
```

```
    firstTime = false;
```

```
    currPos = parseInt(moverObj.style.left) + 1;
```

```
    moverObj.style.left = currPos + "px";
```

```
    if (currPos <= endPoint)
```

```
    {
```

```
      setTimeout("warpspeed()",5);
```

```
    }
```

```
  }
```

```
</script>
```

Set the value of **firstTime** to false.

Results: if this is the first time the script runs then the body of the conditional is executed and the **moverObj** position is initialized accordingly. After this, **firstTime** is set to false. Consequently, the next time the function is called, the first part of the conditional is skipped, because **firstTime** is no longer true.

```
<html>
<head>
  <title>Text Animation</title>
```

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

```
  var firstTime = true;
  var moverObj = document.getElementById("mover");
  var endPoint = 1400;
  var currPos = 0;
```

```
  function warpspeed() {
```

```
    if (firstTime) {
```

```
      moverObj.style.left = "0px";
      moverObj.style.visibility = "visible";
      endPoint = 1400;
```

```
    }
```

```
    firstTime = false;
```

```
    currPos = parseInt(moverObj.style.left) + 1;
    moverObj.style.left = currPos + "px";
```

```
    if (currPos <= endPoint)
```

```
    {
```

```
      setTimeout("warpspeed()", 5);
```

```
    }
```

```
  }
```

```
</script>
```

Alter the position of the moverObj. Increment by 1 pixel the left property of the style of the moverObj. Use the `parseInt( )` method to ensure that you are only working with whole numbers and not generating fractions.

Then include a conditional which tests whether the currPos is less than or equals to the value of the endPoint. If this test is true, then call the warpspeed function every 5 milliseconds by using the `setTimeout( )` method.

```
<html>
<head>
  <title>Text Animation</title>

  <script type="text/javascript">

    var firstTime = true;
    var moverObj;
    var endPoint;
    var currPos;

    function warpspeed()
    {
      if (firstTime)
      {
        moverObj = document.getElementById("mover");
        moverObj.style.left = "-750px";
        endPoint = 1400;
      }
      firstTime = false;
      currPos = parseInt(moverObj.style.left) + 1;
      moverObj.style.left = currPos + "px";

      if (currPos <= endPoint)
      {
        setTimeout("warpspeed()",5);
      }
    }

  </script>
```



text\_animation - Notepad  
File Edit Format View Help

text\_animation - Notepad  
File Edit Format View Help

```
<style type="text/css">  
  
    #mover  
    {position:absolute;  
      top:130px;  
      font-size:200px;  
      font-family:arial;  
      color:#9a9a9a;  
      white-space:nowrap;}  
  
</style>
```

```
</head>  
<body bgcolor="#ffffff" onLoad=  
    <div id="mover">My Text</div>  
  
</body>  
</html>
```

Apply style to the mover element by using the id selector. In CSS, id selector names are preceded by a number sign # The style sheet defines the position of the mover element by using absolute positioning. It also applies the nowrap value to the white-space property so that the text string does not wrap as it reaches the right-hand edge of the browser window.

```
<body bgcolor="#ffffff" onLoad="warped()">  
  
    <div id="mover">My Text</div>  
  
</body>  
</html>
```

text\_animation - Notepad  
File Edit Format View Help

text\_animation - Notepad  
File Edit Format View Help

```
<style type="text/css">

    #mover
    {position:absolute;
      top:130px;
      font-size:200px;
      font-family:arial;
      color:#9a9a9a;
      white-space:nowrap;}

</style>

</head>
<body bgcolor="#ffffff" onLoad="warpspeed()">

    <div id="mover">My Text</div>

</body>
</html>
```

In the <body> use a <div> to identify a block of text as the mover element.

```
<body bgcolor="#ffffff" onLoad="warpspeed()">

    <div id="mover">My Text</div>

</body>
</html>
```

text\_animation - Notepad  
File Edit Format View Help

text\_animation - Notepad  
File Edit Format View Help

```
<style type="text/css">

    #mover
    {position:absolute;
      top:130px;
      font-size:200px;
      font-family:arial;
      color:#9a9a9a;
      white-space:nowrap;}

</style>

</head>
<body bgcolor="#ffffff" onLoad="warpspeed()">

    <div id="mover">My Text</div>

</body>
</html>
```

text\_animation.html

```
<body bgcolor="#ffffff" onLoad="warpspeed()">

    <div id="mover">My Text</div>

</body>
</html>
```

```
text_animation - Notepad
File Edit Format View Help

<html>
<head>
  <title>Text Animation</title>

  <script type="text/javascript">

    var firstTime = true;
    var moverObj;
    var endPoint;
    var currPos;

    function warpspeed()
    {
      if (firstTime)
      {
        moverObj = document.getElementById("mover");
        moverObj.style.left = "-750px";
        endPoint = 1400;
      }
      firstTime = false;
      currPos = parseInt(moverObj.style.left) + 1;
      moverObj.style.left = currPos + "px";

      if (currPos <= endPoint)
      {
        setTimeout("warpspeed()",5);
      }
    }

  </script>

  <style type="text/css">

    #mover
    {position:absolute;
      top:130px;
      font-size:200px;
      font-family:arial;
      color:#9a9a9a;
      white-space:nowrap;}

  </style>

</head>
<body bgcolor="#ffffff" onLoad="warpspeed()">

  <div id="mover">My Text</div>

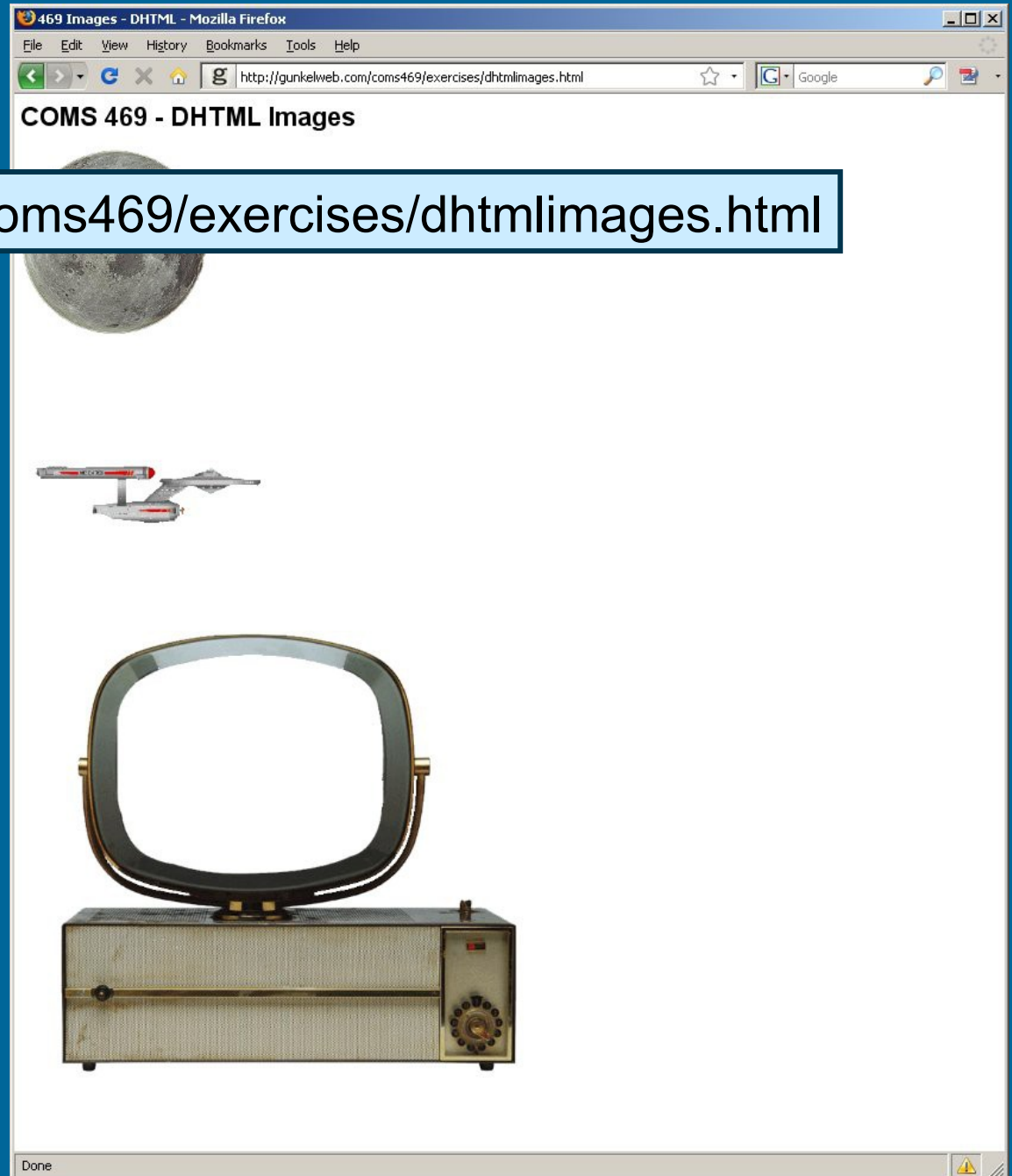
</body>
</html>
```

text\_animation.html



<http://gunkelweb.com/coms469/exercises/dhtmlimages.html>

## Graphic Animation



```
graphic_animation - Notepad
graphic_animation - Notepad
File Edit Format View Help
<html>
<head>
  <title>Graphic Animation</title>

  <script type="text/javascript">

    var firstTime = true;
    var moverObj;
    var endPoint;
    var currPos;

    function warpspeed()
    {
      if (firstTime)
      {
        moverObj = document.getElementById("mover");
        moverObj.style.left = "-350px";
        endPoint = 1400;
      }
      firstTime = false;
      currPos = parseInt(moverObj.style.left) + 1;
      moverObj.style.left = currPos + "px";

      if (currPos <= endPoint)
      {
        setTimeout("warpspeed()", 5);
      }
    }

  </script>
```

Same as the previous example. The only difference is the initial position of the moving element. (This is a nice illustration of the concepts of *modularity* and *reusability*, which are central to object oriented programming.)

Use id selectors in the CSS to apply style to the two page elements with the id name **television** and **mover**. Use absolute positioning and include a **z-Index**, which specifies the element's position along the z axis. The higher **z-Index** number situates an element in the foreground; the lower **z-Index** number situates an element in the background.

```
<style type="text/css">
  #television {position:absolute; z-Index:2;right:30px;}
  #mover {position:absolute; z-Index:1}
</style>

</head>
<body bgcolor="#ffffff" onLoad="warpspeed()">

  <div id="television"></div>
  <div id="mover"></div>

</body>
</html>
```

```
graphic_animation - Notepad
File Edit Format View Help

<html>
<head>
  <title>Graphic Animation</title>

  <script type="text/javascript">

    var firstTime = true;
    var moverObj;
    var endPoint;
    var currPos;

    function warpspeed()
```

In the <body> use <div> with the id attribute. Set the value of the first id to television and the second to mover.

```
graphic_animation - Notepad
File Edit Format View Help

<style type="text/css">

  #television {position:absolute; z-Index:2;right:30px;}
  #mover {position:absolute; z-Index:1}

</style>

</head>
<body bgcolor="#ffffff" onLoad="warpspeed()">

  <div id="television"></div>
  <div id="mover"></div>

</body>
</html>
```



```
graphic_animation - Notepad
File Edit Format View Help

<html>
<head>
  <title>Graphic Animation</title>

  <script type="text/javascript">

    var firstTime = true;
    var moverObj;
    var endPoint;
    var currPos;

    function warpspeed()
```

graphic\_animation.html

```
graphic_animation - Notepad
File Edit Format View Help

<style type="text/css">

  #television {position:absolute; z-Index:2;right:30px;}
  #mover {position:absolute; z-Index:1}

</style>

</head>
<body bgcolor="#ffffff" onLoad="warpspeed()">

  <div id="television"></div>
  <div id="mover"></div>

</body>
</html>
```

```
graphic_animation - Notepad
File Edit Format View Help

<html>
<head>
  <title>Graphic Animation</title>

  <script type="text/javascript">

    var firstTime = true;
    var moverObj;
    var endPoint;
    var currPos;

    function warpspeed()
    {
      if (firstTime)
      {
        moverObj = document.getElementById("mover");
        moverObj.style.left = "-350px";
        endPoint = 1400;
      }
      firstTime = false;
      currPos = parseInt(moverObj.style.left) + 1;
      moverObj.style.left = currPos + "px";

      if (currPos <= endPoint)
      {
        setTimeout("warpspeed()",5);
      }
    }

  </script>

  <style type="text/css">

    #television {position:absolute; z-index:2;right:30px;}
    #mover {position:absolute; z-index:1}

  </style>

</head>
<body bgcolor="#ffffff" onLoad="warpspeed()">

  <div id="television"></div>
  <div id="mover"></div>

</body>
</html>
|
```

graphic\_animation.html

# Preview

- Project #1 Workshop

# Preview

- Project #1
  - Deliverables
    - CD-ROM/DVD-ROM
    - Jump Drive
    - Online
  - Labels
    - Name
    - Email Address
    - Name of the first file





# Preview

- Evaluation Sheet
  - Anticipate evaluation
  - Self-evaluation
- Presentation
  - 4-5 minute overview
  - Not graded

COMS 469  
Project #1

Name:

**Content & Design (20 points) –**

- ☐ The project is turned in on time and in the proper format. (5)
- ☐ Site correctly employs standard HTML code and is free from significant errors or problems. (5)
- ☐ Text information is free from errors in spelling, grammar, and punctuation. (5)
- ☐ Layout and color combinations are appropriate for the content communicated, create a consistent and accessible presentation of content, and provide the site with a professional appearance. (5)

**DHTML (20 points) –**

- ☐ The site employs JavaScript and CSS to alter page element appearance and behavior (i.e. image rollovers, positioning and moving page elements, or other forms of animation). (5)
- ☐ The JavaScript and CSS is written properly and is without errors in syntax. (5)
- ☐ The DHTML features function properly, do not exhibit errors, or provide inconsistent or unstable results. (5)
- ☐ The DHTML features provide for appropriate forms of user interaction, are integrated into the overall site design, and complement the site's general appearance. (5)

**Windows & Frames (20 points) –**

- ☐ The site employs JavaScript to control the opening, closing, layering, positioning, and content of windows and/or frames. (5)
- ☐ The JavaScript is written properly and is without errors in syntax. (5)
- ☐ The window and/or frame features function properly, do not exhibit errors, or provide inconsistent or unstable results. (5)
- ☐ The window and/or frame options are appropriate for the site's design and provide the user with useful feedback and navigational information. (5)

**Forms & Cookies (20 points) –**

- ☐ The site employs JavaScript to validate or process form entry data and/or write cookies to the user's system. (5)
- ☐ The JavaScript is written properly and is without errors in syntax. (5)
- ☐ The form and/or cookies application functions properly and does not exhibit errors or provide inconsistent results. (5)
- ☐ The validation alerts and/or cookie-generated content provide the user with valuable prompts, feedback, and information. (5)

**Dynamic Content (20 points) –**

- ☐ The site employs JavaScript to generate page content (i.e. customized messages, date and time information, user customization, or other forms of dynamically generated page content). (5)
- ☐ The JavaScript is written properly and is without errors in syntax. (5)
- ☐ The dynamically generated data function properly, do not exhibit errors, or provide inconsistent or unstable results. (5)
- ☐ The incorporation of dynamic content is motivated by the project's objectives and design, and it fits appropriately into the site's structure and approach. (5)

**Total –**