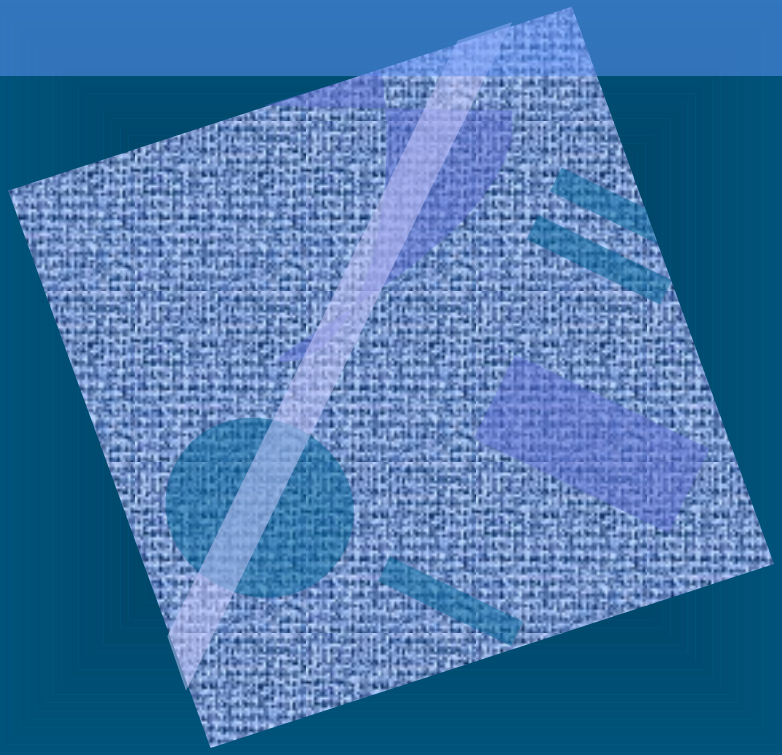
COMS 469: Interactive Media II

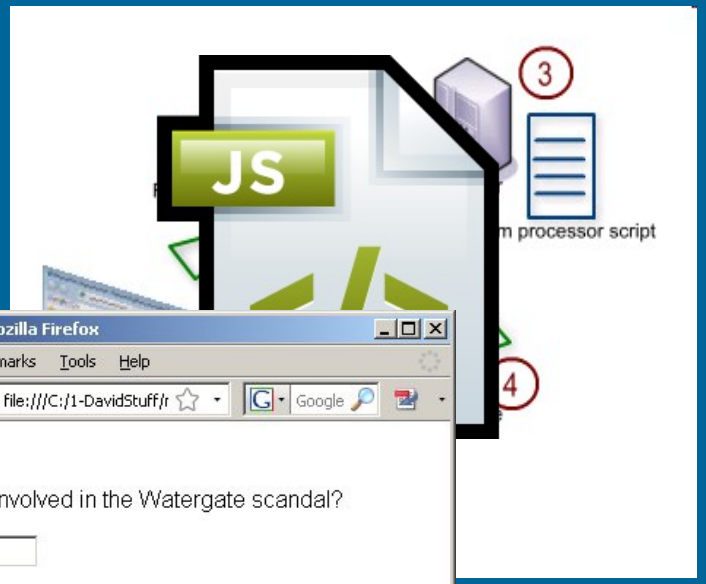


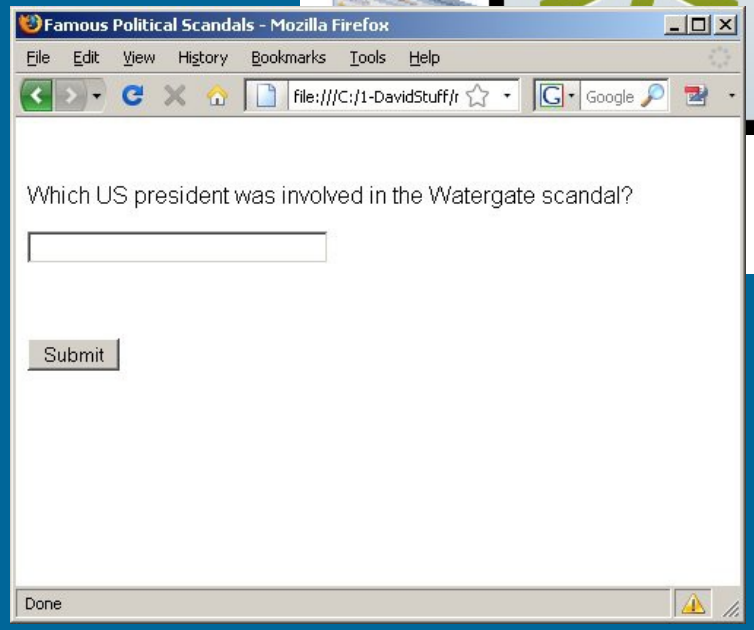
Agenda

- Review
- Ch. 8: Windows and Frames (pp. 263-299)
- Ch. 11: Storing Info: Cookies (pp. 367-389)

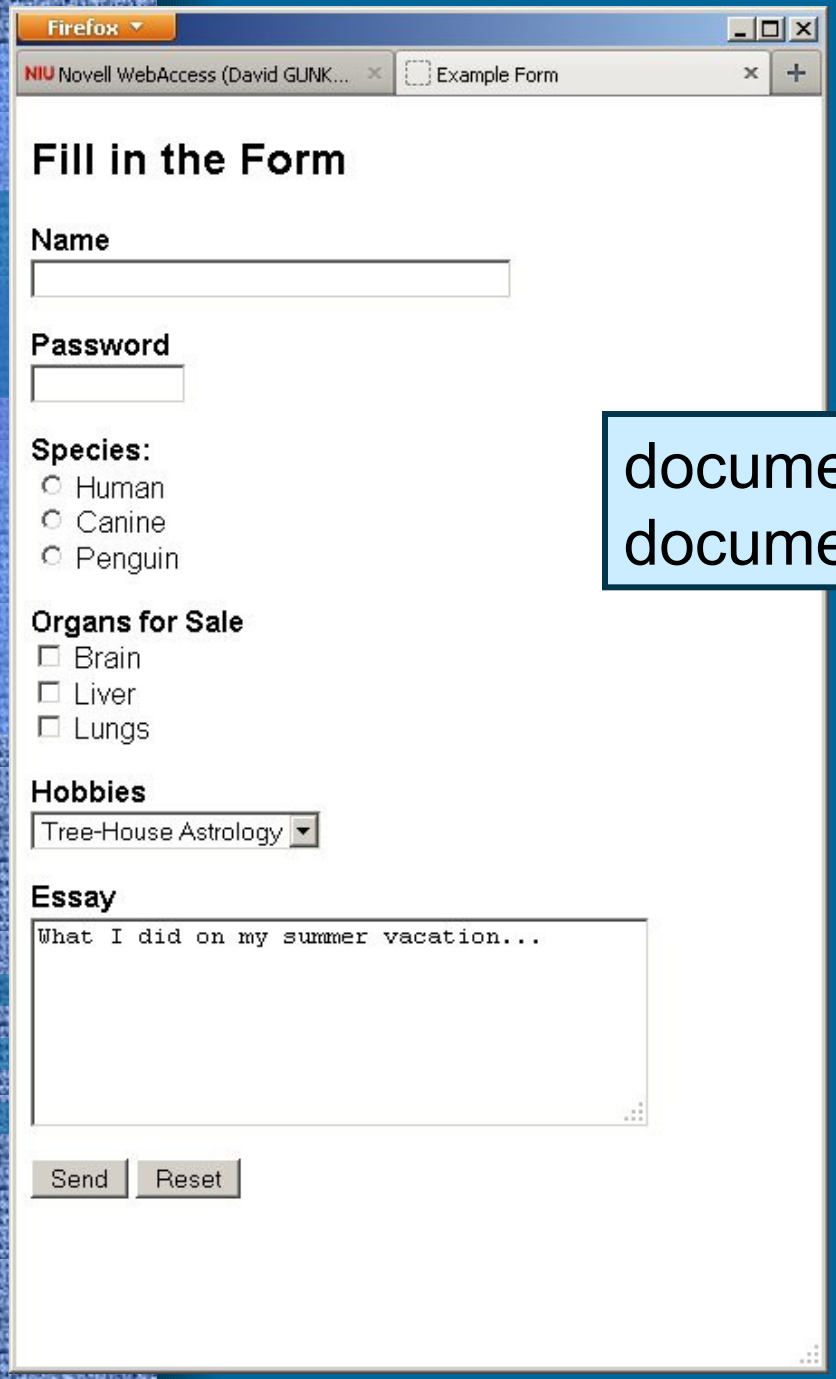
Review

- HTML Forms
- String Manipulation

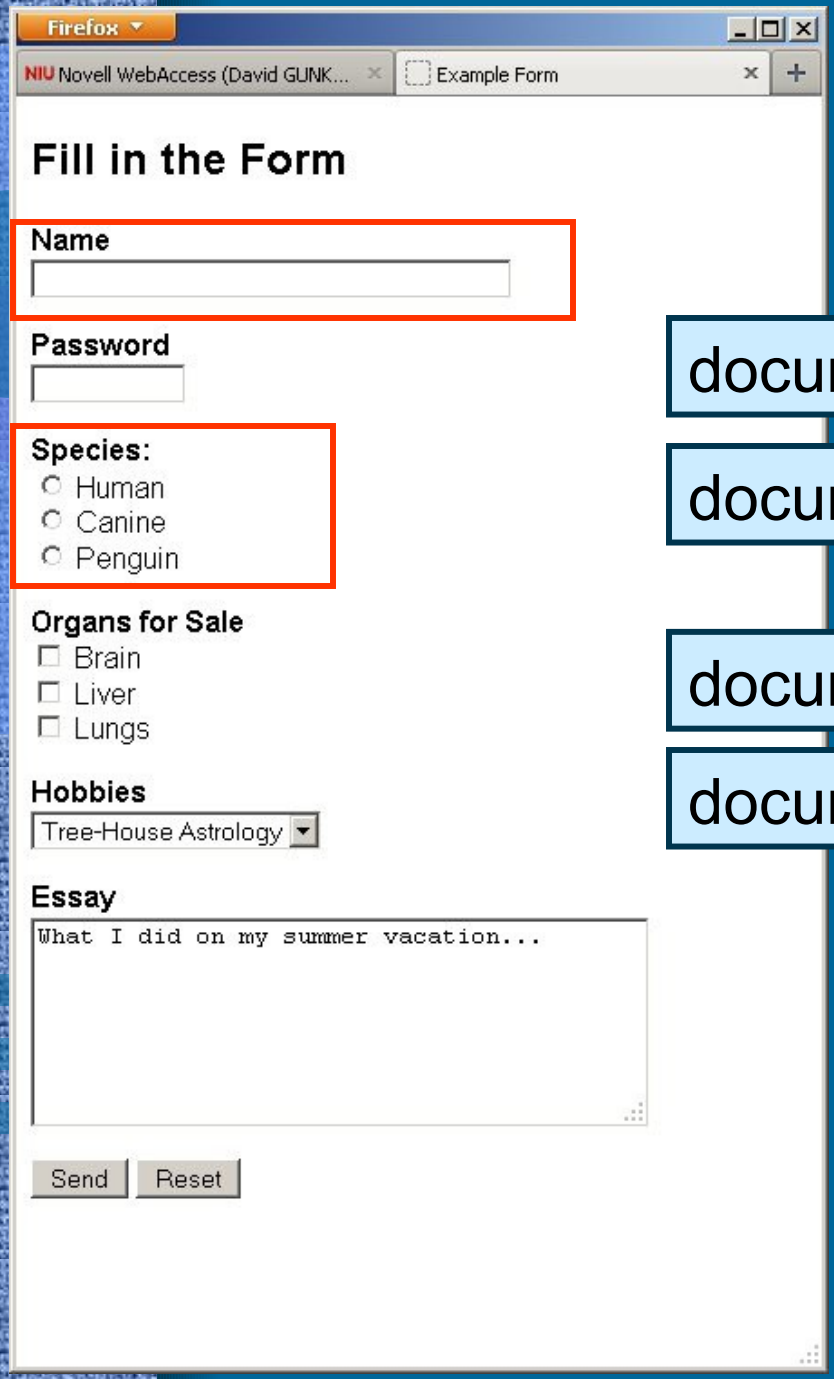




Objects




```
document.myForm
document.forms[0]
```



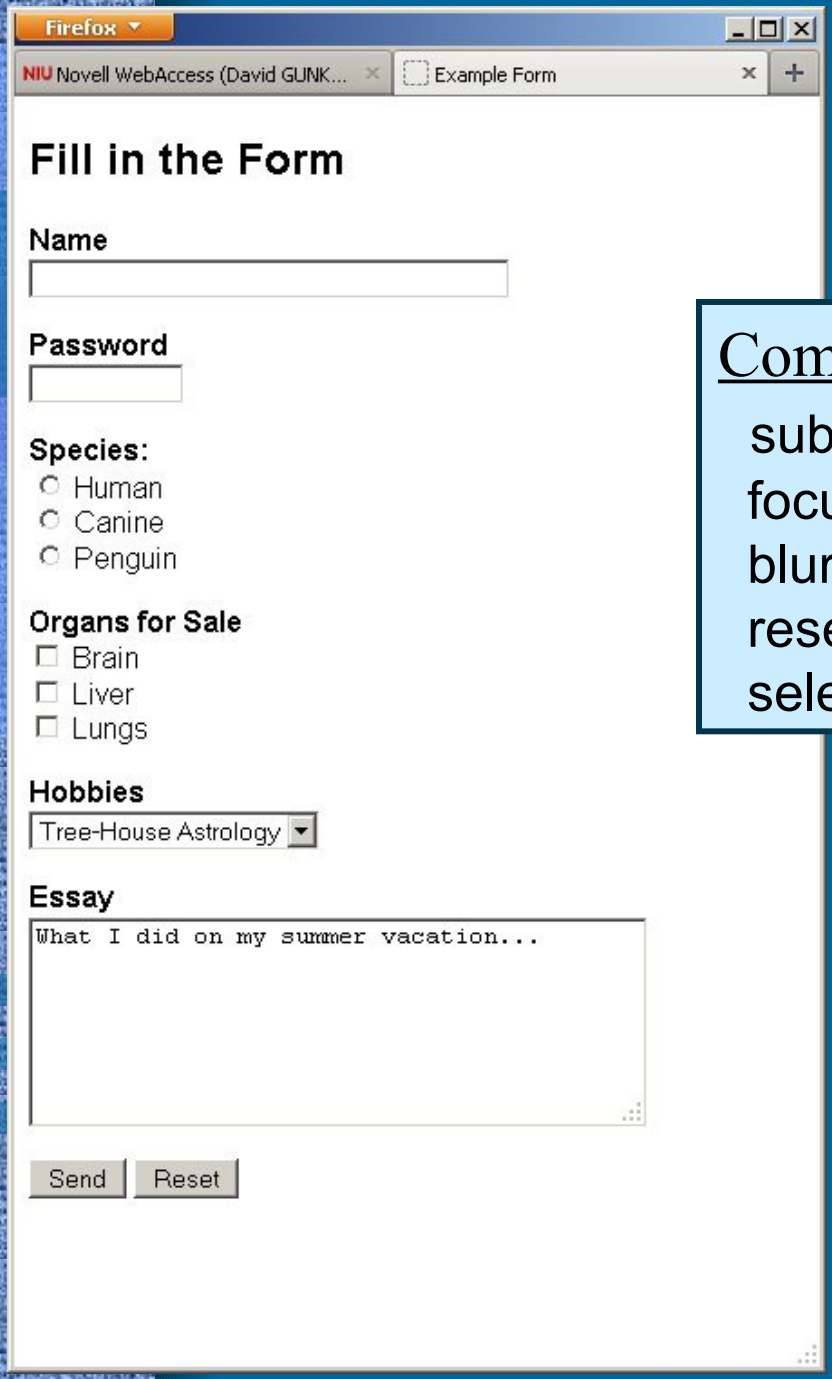
Properties

document.form[0].element[0]

document.myForm.userName

document.form[0].element[2]

document.myForm.species

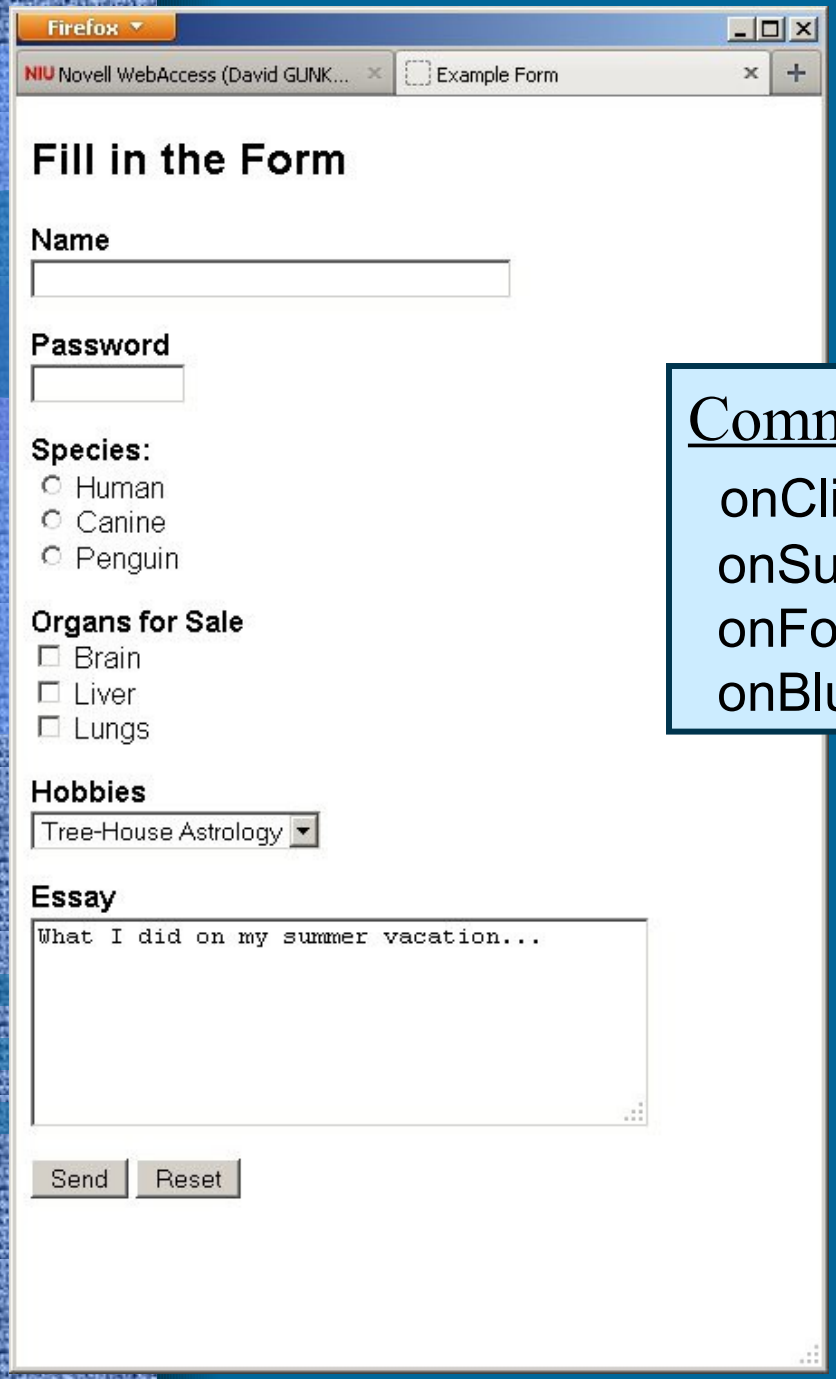


Methods

Common Methods

submit( )
focus( )
blur( )
reset( )
select( )

Event Handlers



Common Event Handlers

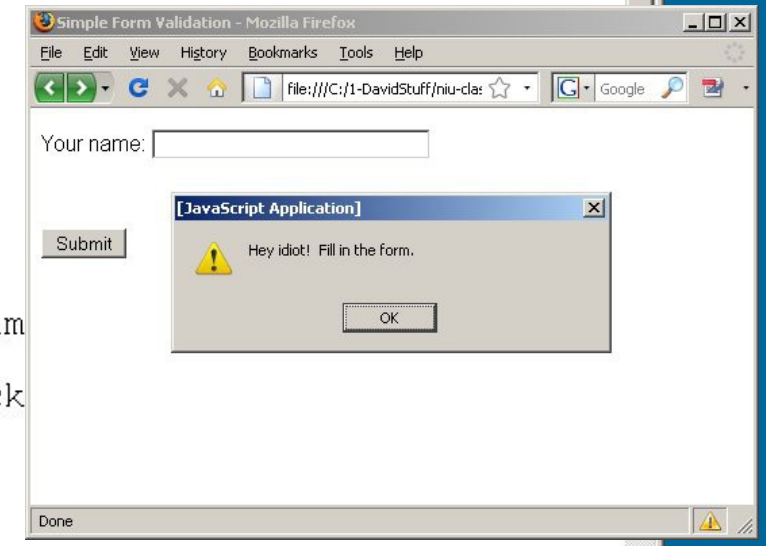
- onClick
- onSubmit
- onFocus
- onBlur

Basic Form Validation

validation1 - Notepad

File Edit Format View Help

```
<html>
<head>
 <title>Simple Form Validation</title>

  <script type="text/javascript">

      function formValidation()
        {
          if (document.forms[0].userName.value == "")
            {
              alert("Hey idiot!  Fill in the form.");
            }
          else
            {
              alert("thanks for the information.");
            }
        }
  </script>

</head>

<body bgcolor="#ffffff">

 <form>

  <p>Your name: <input type="text" size="30" nam

  <p><input type="button" value="Submit" onClick


 </form>

</body>
</html>
```



Advanced Form Validation

validation2 - Notepad

File Edit Format View Help

```
<html>
<head>
 <title>More Complex Form Validation</title>

  <script type="text/javascript">

    function formValidation()
      {
        if (document.forms[0].userName.value == "")
         {
           alert("Hey idiot!  Fill in the form.");
         }
        else
         {
           var beerChoice = -1;
           for (loopCounter=0; loopCounter < document.forms[0].beer.length; loop
             {
               if (document.forms[0].beer[loopCounter].checked == true)
                {
                  beerChoice = loopCounter;
                  break;
                }
             }
           if (beerChoice == -1)
             {
               alert("You must select a beer.");
             }
           alert("Your name is " + document.forms[0].userName.value +
                 ". Your beer is " + document.forms[0].beer[beerChoice].value);
         }
       }
  </script>

</head>

<body bgcolor="#ffffff">

 <form>

 <h1>Beverage Selector</h1>
 <hr>
  <p>Your name: <input type="text" size="30" name="userName"></p>

  <p>Your beer:
    <br><input type="radio" value="Pabst" name="beer">Pabst
    <br><input type="radio" value="Blatz" name="beer">Blatz
    <br><input type="radio" value="Schlitz" name="beer">Schlitz
    <br><input type="radio" value="Old Style" name="beer">Old Style</p>

  <p><input type="button" value="Submit" onClick="formValidation()"></p>

 </form>

</body>
</html>
```

More Complex Form Validation - Mozilla Firefox

File Edit View History Bookmarks Tools Help

Beverage Selector

Your name:

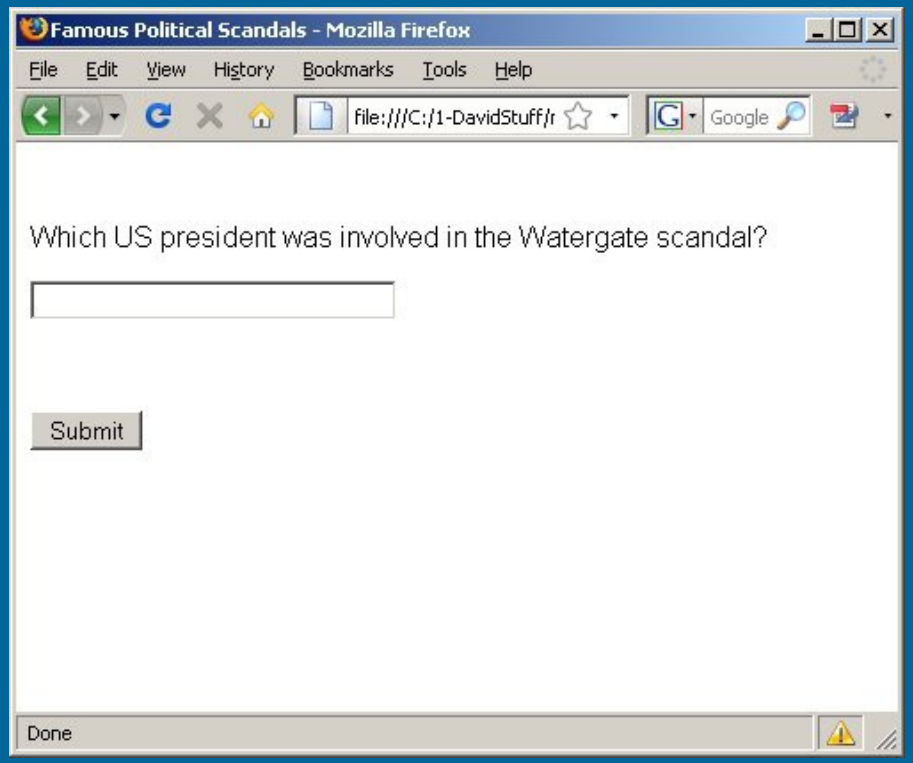
Your beer:
- Pabst
- Blatz
- Schlitz
- Old Style

Submit

Done

Review

- String Methods
  - split( )
  - match( )
  - replace( )
  - search( )



Review

- Writing Regular Expressions

```
var myRegExp = / …. /;
```

```
var myRegExp = new RegExp(“ …. ”);
```

- Using Regular Expressions
  - String methods – search( ), match( ), replace( )
  - RegExp methods – compile( ), exec( ), test( )

Character Class	Character It Matches	Example
\d	Any digit from 0 to 9	\d\d matches 72 but not aa or 7a

Special Character	Meaning	Example
*	Matches the previous item zero or more times	x* matches nothing or x, xx, xxx, xxxx, etc.
[^…]	Any one character, but not one of those inside the brackets	[^a-z] matches any character that is not in the range a-z

Position Character	Description
^	The pattern must be at the start of the string, or if it is a multi-line string, then at the beginning of the line.
$	The pattern must be at the end of the string, or if it is a multi-line string, then at the end of the line.
\b	Matches a word boundary, which is essentially the point between a word character and a non-word character.
\B	Matches a position that is not a word boundary.

Regular Expression Library - Mozilla Firefox

File Edit View History Bookmarks Tools Help

Novell WebAccess (David GUNKEL) | The Super Fantastic Order Form | Regular Expression Library | Form Validation Redux

regexlib.com

RegExLib.com

Search Results: 296 regular expressions found.

Change page: | Displaying page 1 of 15 pages; Items 1 to 20

Title Pattern Title

Details Test

Expression ^[2-9]\d{2}-\d{3}-\d{4}$

Description This expression matches a hyphen separated US phone number, of the form ANN-NNN-NNNN, where A is between 2 and 9 and N is between 0 and 9.

Matches 800-555-5555 | 333-444-5555 | 212-666-1234

Non-Matches 000-000-0000 | 123-456-7890 | 2126661234

Author Steven Smith

Rating: Not yet rated.

Community

- Regex Forums
- Regex Blogs
- Regex Mailing List

Top Contributors

- Evaluates your regular expression while you are typing;
- 4 distinct match modes:
  - Find a sequence of characters;
  - Match a complete text;
  - Split text (see java.lang.String.split(String regex));
  - Replace;
- Support for pattern flags (e.g. Pattern.CASE_INSENSITIVE, Pattern.DOTALL, ...);
- Generation of java source string literals based on the regexp, (escape slash, e.g. "\(x\)" becomes "\\(x\\)")
- Synchronized selection of regular expression and text: Just select part of the regexp to see which part of the text is matched by this part.

Spin up a Wordpress site in seconds.

Once you get it, you'll get it.

http://RegExLib.com

Basic Regular Expression Validation

nixon_question2 - Notepad

File Edit Format View Help

```
<html>
<head>
 <title>Famous Political Scandals</title>

  <script type="text/javascript">

     function formValidation()
      {
        var answer = document.forms[0].userResponse.value;
        var myRegExp = /(Richard|R\.?)?(Milhous|M\.?)?Nixon/i;
        var correct = answer.search(myRegExp);

        if (correct == -1)
         {
           alert("Hey idiot, you got it wrong
         }
        else
         {
           alert("Big surprise, you got it rig
         }
      }

  </script>

</head>

<body bgcolor="#ffffff">

 <form>
  <br>
  <p>Which US president was involved in the Wa
  <p> <input type="text" size="30" name="userI
  <br>
  <p><input type="button" value="Submit" onCl

 </form>

</body>
</html>
```

Famous Political Scandals - Mozilla Firefox

File Edit View History Bookmarks Tools Help

file:///C:/1-DavidStuff/r

Google

Which US president was involved in the Watergate scandal?

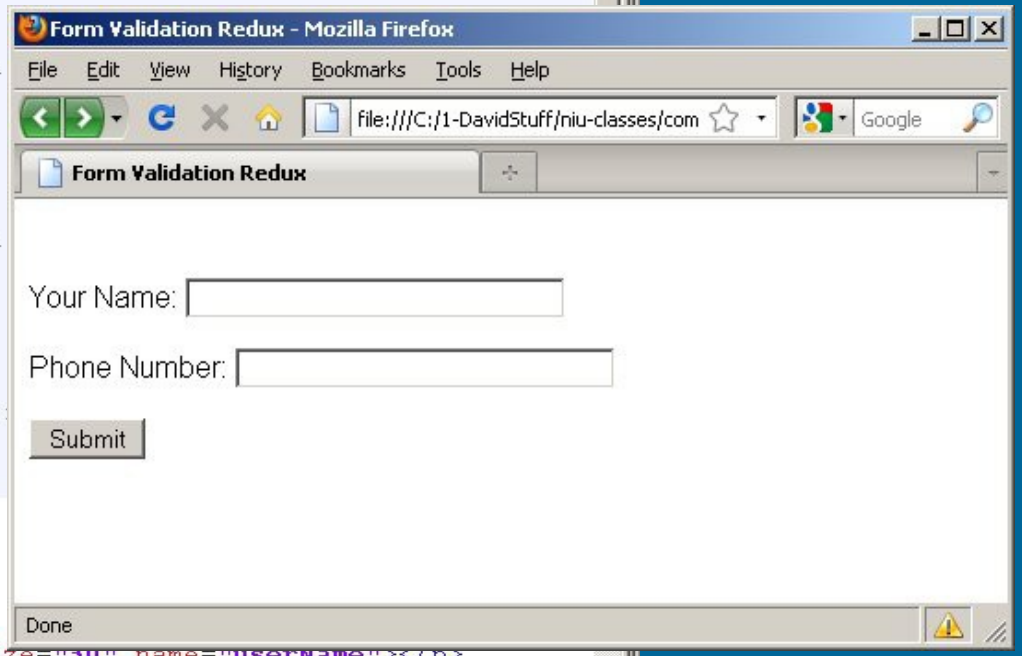
Submit

Done

Advanced Regular Expression Validation

validation_redux3.html

```
<html>
<head>
 <title>Form Validation Redux</title>
  <script type="text/javascript">
    function formValidation()
      {
        var answerName = document.forms[0].userName.value;
        var nameRegExp = /[^ \d]/;
        var correctName = answerName.search(nameRegExp);

        var answerPhone = document.forms[0].userPhone.value;
        var phoneRegExp = /^[2-9]\d{2}-\d{3}-\d{4}$/;
        var correctPhone  = phoneRegExp.exec(answerPhone)

        if (correctName == -1)
          {
            alert("Error--Please enter a
            return false;
          }
        if (!correctPhone)
          {
            alert("Error--Please enter a
            return false;
          }
        else
          {
            alert("All information is co
          }
       }
  </script>
</head>
<body bgcolor="#ffffff">
   <form>
     <p>Your Name: <input type="text" size="30" name="userName"></p>
     <p>Phone Number: <input type="text" size="30" name="userPhone"></p>
     <p><input type="button" value="Submit" onClick="formValidation()"></p>
   </form>
</body>
</html>
```



The Super Fantastic Order Form - Mozilla Firefox

File Edit View History Bookmarks Tools Help

The Super Fantastic Order Form

file:///C:/1-DavidStuff/niu-classes/coms

Order Form

$12.99 3 $38.

$15.99 4 $63.

+ 8% tax $11

Firefox

Test Yourself

Web Design Quiz

1. What does CSS stand for?
   - (•) Colorful Style Symbols
   - ( ) Cascading Style Sheets
   - ( ) Computer Style Symbols

X

2. What does DHTML stand for?
   - ( ) Dramatic HTML
   - ( ) Design HTML
   - (•) Dynamic HTML

OK

3. Who invented the World Wide Web? My Mom

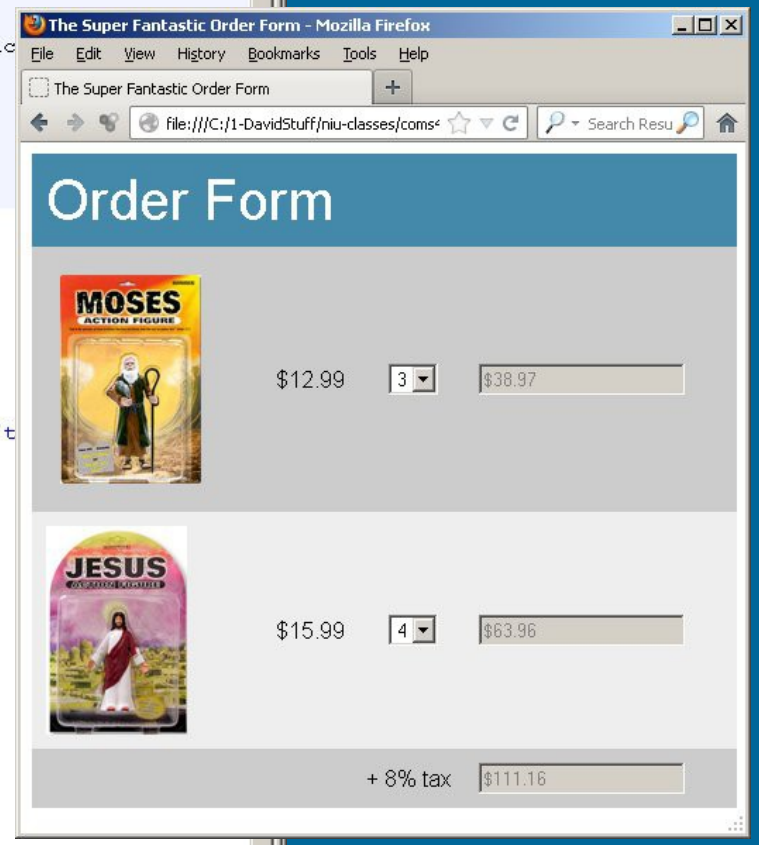
X

Get score | Clear answers

Score = 33%

jesus_form.html

```
<html>
<head>
  <title>The Super Fantastic Order Form</title>
  <script type="text/javascript">
    function addTotal()
      {
        var jesusPrice;
        var jesusTotal;
        var grandTotal;
        var tax = 0.08;

        jesusTotal = document.forms[0].jesus.value * document.forms[0].jesusPric
        document.forms[0].inputbox1.value = "$" + jesusTotal;

        grandTotal = (jesusTotal * tax) + jesusTotal;
        document.forms[0].inputbox2.value = "$" + grandTotal.toFixed(2);
      }
  </script>
</head>

<body bgcolor="#ffffff">
<form name="myForm" action="something.php">
  <table border="0" cellspacing="0" cellpadding="10" width="500">
    <tr bgcolor="#4488aa">
        <td colspan="4" style="font-size:40px; color:#ffffff">Order Form</td></t
    <tr bgcolor="#eeeeee">
        <td><img src="images/jesus.jpg"></td>
        <td>$15.99<input type="hidden" value="15.99" name="jesusPrice"></td>
        <td>
          <select name="jesus" onClick="addTotal()">
            <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>
        <td><input type="text" name="inputbox1" disabled></td></tr>
    <tr bgcolor="#cccccc">
        <td colspan="3" align="right"> + 8% tax </td>
        <td><input type="text" name="inputbox2" disabled></td></tr>
  </table>
</form>
</body>
</html>
```



jesus_form.html

```
<html>
<head>
```

```
<html>
<head>
  <title>The Super Fantastic Order Form</title>
  <script type="text/javascript">
    function addTotal()
      {
        var mosesPrice;
        var mosesTotal;
        var jesusPrice;
        var jesusTotal;
        var orderTotal;
        var grandTotal;
        var tax = 0.08;

        mosesTotal = document.forms[0].moses.value * document.forms[0].mosesPrice.value;
        document.forms[0].inputbox1.value = "$" + mosesTotal;

        jesusTotal = document.forms[0].jesus.value * document.forms[0].jesusPrice.value;
        document.forms[0].inputbox2.value = "$" + jesusTotal;

        orderTotal = jesusTotal + mosesTotal;
        grandTotal = (orderTotal * tax) + orderTotal;
        document.forms[0].inputbox3.value = "$" + grandTotal.toFixed(2);
      }
  </script>
</head>
```

```
        <td colspan="3" align="right"> + 8% tax </td>
        <td><input type="text" name="inputbox2" disabled></td></tr>
  </table>
</form>
</body>
</html>
```

jesus_form.html

```
<html>
<head>
```

```
<html>
<head>
  <title>The Su
  <script type=
    function ad
      {
        var mos
        var mos
        var jes
        var jes
        var ord
        var gra
        var tax

        mosesTo
        docume

        jesusTo
        docume

        orderTo
        grandTo
        docume
      }
  </script>
</head>
```

```
      <td colspan="
      <td><input ty
  </table>
</form>
</body>
</html>
```

```
<body bgcolor="#ffffff">
<form name="myForm" action="something.php">
  <table border="0" cellspacing="0" cellpadding="10" width="500">
    <tr bgcolor="#4488aa">
        <td colspan="4" style="font-size:40px; color:#ffffff">Order Form</td></tr>
    <tr bgcolor="#cccccc">
       <td><img src="images/moses.jpg" style="margin:10px"></td>
       <td> $12.99 <input type="hidden" value="12.99" name="mosesPrice"> </td>
       <td>
          <select name="moses" onClick="addTotal()">
            <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>
        <td> <input type="text" name="inputbox1" disabled> </td></tr>
    <tr bgcolor="#eeeeee">
        <td><img src="images/jesus.jpg"></td>
        <td>$15.99<input type="hidden" value="15.99" name="jesusPrice"></td>
        <td>
          <select name="jesus" onClick="addTotal()">
            <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>
        <td><input type="text" name="inputbox2" disabled></td></tr>
    <tr bgcolor="#cccccc">
        <td colspan="3" align="right"> + 8% tax </td>
        <td><input type="text" name="inputbox3" disabled></td></tr>
  </table>
</form>
</body>
</html>
```

Firefox

Test Yourself

Web Design Quiz

1. What does CSS stand for?
   - (•) Colorful Style Symbols
   - ( ) Cascading Style Sheets
   - ( ) Computer Style Symbols

X

2. What does DHTML stand for?
   - ( ) Dramatic HTML
   - ( ) Design HTML
   - (•) Dynamic HTML

OK

3. Who invented the World Wide Web? My Mom

X

Get score | Clear answers

Score = 33%

```
<body>
<h1>Web Design Quiz</h1>
<form>
  <table border="0" width="400" cellpadding="10" cellspacing="5">
    <tr>
      <td><dl>
        <dt>1. What does CSS stand for?</dt>
        <dd><input type="radio" name="q1" value="Colorful Style Symbols">Colorful Style Symbols</dd>
        <dd><input type="radio" name="q1" value="Cascading Style Sheets">Cascading Style Sheets</dd>
        <dd><input type="radio" name="q1" value="Computer Style Symbols">Computer Style Symbols
</dd></dl></td>
      <td width="100"><img src="images/blank.jpg" name="firstQuestion"></td></tr>
    <tr>
      <td><dl>
        <dt>2. What does DHTML stand for?</dt>
        <dd><input type="radio" name="q2" value="Dramatic HTML">Dramatic HTML</dd>
        <dd><input type="radio" name="q2" value="Design HTML">Design HTML</dd>
        <dd><input type="radio" name="q2" value="Dynamic HTML">Dynamic HTML</dd></dl></td>
      <td width="100"><img src="images/blank.jpg" name="secondQuestion"></td></tr>
    <tr>
      <td>3. Who invented the World Wide Web?
        <input type="text" size="20" name="userResponse"></td>
      <td width="100"><img src="images/blank.jpg" name="thirdQuestion"></td></tr>
  </table>
 <br>
   <input type="button" value="Get score" onClick="getScore()">
   <input type="reset" value="Clear answers" onClick="clearImage()">
 <p> Score = <input type="text" size="5" name="theScore" disabled></p>
</form>
</body>
</html>
```

```
<body>
<h1>Web Design Quiz</h1>
<form>
  <table border="0" width="400" cellpadding="10"
    <tr>
      <td><dl>
        <dt>1. What does CSS stand for?</dt>
        <dd><input type="radio" name="q1" valu
        <dd><input type="radio" name="q1" valu
        <dd><input type="radio" name="q1" valu
</dd></dl></td>
      <td width="100"><img src="images/blank.jp
    <tr>
      <td><dl>
        <dt>2. What does DHTML stand for?</dt>
        <dd><input type="radio" name="q2" value="Dramatic HTML">Dramatic HTML</dd>
        <dd><input type="radio" name="q2" value="Design HTML">Design HTML</dd>
        <dd><input type="radio" name="q2" value="Dynamic HTML">Dynamic HTML</dd></dl></td>
      <td width="100"><img src="images/blank.jpg" name="secondQuestion"></td></tr>
    <tr>
      <td>3. Who invented the World Wide Web?
        <input type="text" size="20" name="userResponse"></td>
      <td width="100"><img src="images/blank.jpg" name="thirdQuestion"></td></tr>
  </table>
 <br>
  <input type="button" value="Get score" onClick="getScore()">
  <input type="reset" value="Clear answers" onClick="clearImage()">
 <p> Score = <input type="text" size="5" name="theScore" disabled></p>
</form>
</body>
</html>
```

HTML Form

2 Sets of Radio Buttons for the first two multiple choice questions

1 text input for the third question.

2 buttons with onClick( ) event handlers

- The first one calls the getScore( ) function
- The second one calls the clearImage( ) function

3 <img> tags with src set to blank.jpg

```
<html>
<head>
<title>Test Yourself</title>
  <script type="text/javascript">
   function getScore()
     {
       var score=0;
       var answer = document.forms[0].userResponse.value;
       var myRegExp = /(Tim|T\.?)?( ?)?Berners(-?)?( ?)?Lee/i;
       var correct = answer.search(myRegExp);
       if (document.forms[0].elements[1].checked)
         {
           score++;
           document.firstQ
         }
       else
         {
           document.firstQ
         }
       if (document.forms[
         {
           score++;
           document.second
         }
       else
         {
           document.second
         }
       if (correct == 0)
         {
           score++;
           document.thirdQ
         }
       else
         {
           document.thirdQ
         }
       document.forms[0].t
     }
   function clearImage()
     {
       document.firstQuestion.src = "images/blank.jpg";
       document.secondQuestion.src = "images/blank.jpg";
       document.thirdQuestion.src = "images/blank.jpg";
     }
  </script>
</head>
```

Define a function called getScore( )

Declare and initialize four variables:

- **score** which is defaulted to zero
- **answer** which takes its value from the text input field on the form
- **myRegExp** which defines a regular expression for the third question
- **correct** which is assigned the results of a regular expression search performed on the answer variable

```
<html>
<head>
<title>Test Yourself</title>
  <script type="text/javascript">
   function getScore()
     {
       var score=0;
       var answer = document.forms[0].userResponse.value;
       var myRegExp = /(Tim|T\.?)?( ?)?Berners(-?)?( ?)?Lee/i;
       var correct = answer.search(myRegExp);
       if (document.forms[0].elements[1].checked)
         {
           score++;
           document.firstQuestion.src = "images/okay.jpg";
         }
       else
         {
           document.firstQuestion.src = "images/error.jpg";
         }
       if (document.forms[0].elements[5].checked)
         {
           score++;
           document.secondQuestion.src = "images/okay.jpg";
         }
       else
         {
           document.secondQuestion.src = "images/error.jpg";
         }
       if (correct == 0)
         {
           score++;
           document.thirdQuestion.src = "images/okay.jpg";
         }
       else
         {
           document.thirdQuestion.src = "images/error.jpg";
         }
       document.forms[0].theScore.value = Math.round(score/3*100) +
     }
   function clearImage()
     {
       document.firstQuestion.src = "images/blank.jpg";
       document.secondQuestion.src = "images/blank.jpg";
       document.thirdQuestion.src = "images/blank.jpg";
     }
  </script>
</head>
```

Conditional Statements Radio buttons

If the correct element of the forms[0] object is checked, then increment the score variable by 1 and assign the okay.jpg image to the src of the image object.

If this is not the case, then don't increment the score variable and assign the error.jpg image to the src of the image object.

(This is just a modification of our radio button validation script.)

```
<html>
<head>
<title>Test Yourself</title>
  <script type="text/javascript">
   function getScore()
     {
       var score=0;
       var answer = document.forms[0].userResponse.value;
       var myRegExp = /(Tim|T\.?)?( ?)?Berners(-?)?( ?)?Lee/i;
       var correct = answer.search(myRegExp);
       if (document.forms[0].elements[1].checked)
         {
           score++;
           document.firstQuestion.src = "images/okay.jpg";
         }
       else
         {
           document.firstQuestion.src = "images/error.jpg";
         }
       if (document.forms[0].elements[5].checked)
         {
           score++;
           document.secondQuestion.src = "images/okay.jpg";
         }
       else
         {
           document.secondQuestion.src = "images/error.jpg";
         }
       if (correct == 0)
         {
           score++;
           document.thirdQuestion.src = "images/okay.jpg";
         }
       else
         {
           document.thirdQuestion.src = "images/error.jpg";
         }
       document.forms[0].theScore.value = Math.round(score/3*100) +
     }
   function clearImage()
     {
       document.firstQuestion.src = "images/blank.jpg";
       document.secondQuestion.src = "images/blank.jpg";
       document.thirdQuestion.src = "images/blank.jpg";
     }
  </script>
</head>
```

Conditional Statement Text input field

If the value of the correct variable is 0, then increment the score by one and assign the okay.jpg image to the src of the image object.
If this is not the case, then don't increment the score variable and assign the error.jpg image to the src of the image object.

```
<html>
<head>
<title>Test Yourself</title>
  <script type="text/javascript">
    function getScore()
      {
        var score=0;
        var answer = document.forms[0].userResponse.value;
        var myRegExp = /(Tim|T\.?)?( ?)?Berners(-?)?( ?)?Lee/i;
        var correct = answer.search(myRegExp);
        if (document.forms[0].elements[1].chec
          {
            score++;
            document.firstQuestion.src = "imag
          }
        else
          {
            document.firstQuestion.src = "imag
          }
        if (document.forms[0].elements[5].chec
          {
            score++;
            document.secondQuestion.src = "ima
          }
        else
          {
            document.secondQuestion.src = "ima
          }
        if (correct == 0)
          {
            score++;
            document.thirdQuestion.src = "imag
          }
        else
          {
            document.thirdQuestion.src = "images/error.jpg";
          }
        document.forms[0].theScore.value = Math.round(score/3*100) + "%";
      }
    function clearImage()
      {
        document.firstQuestion.src = "images/blank.jpg";
        document.secondQuestion.src = "images/blank.jpg";
        document.thirdQuestion.src = "images/blank.jpg";
      }
  </script>
</head>
```

Calculate the Score

Take the value of the score, divide it by three (because there are 3 questions) and multiple the quotient by 100 (in order to get a percentage).

Apply the round( ) method of the Math object to this result and add a % sign.

Assign this number to the value of theScore input field in the form[0]

```html
<html>
<head>
<title>Test Yourself</title>
  <script type="text/javascript">
    function getScore()
      {
        var score=0;
        var answer = document.forms[0].userResponse.value;
        var myRegExp = /(Tim|T\.?)?( ?)?Berners(-?)?( ?)?Lee/i;
        var correct = answer.search(myRegExp);
        if (document.forms[0].elements[1].checked)
          {
            score++;
            document.firstQuestion.src = "images/okay.jpg";
          }
        else
          {
            document.firstQuestion.src = "images/error.jpg";
          }
        if (document.forms[0].elements[5].checked)
          {
            score++;
            document.secondQuestion.src = "images/okay.jpg";
          }
        else
          {
            document.secondQuestion.src =
          }
        if (correct == 0)
          {
            score++;
            document.thirdQuestion.src = "
          }
        else
          {
            document.thirdQuestion.src = "images/error.jpg";
          }
        document.forms[0].theScore.value = Math.round(score/3*100) + "%";
      }
    function clearImage()
      {
        document.firstQuestion.src = "images/blank.jpg";
        document.secondQuestion.src = "images/blank.jpg";
        document.thirdQuestion.src = "images/blank.jpg";
      }
  </script>
</head>
```

Define a Function clearImage( )

Assign the blank.jpg image to the src of each of the image objects (firstQuestion, secondQuestion & thirdQuestion)

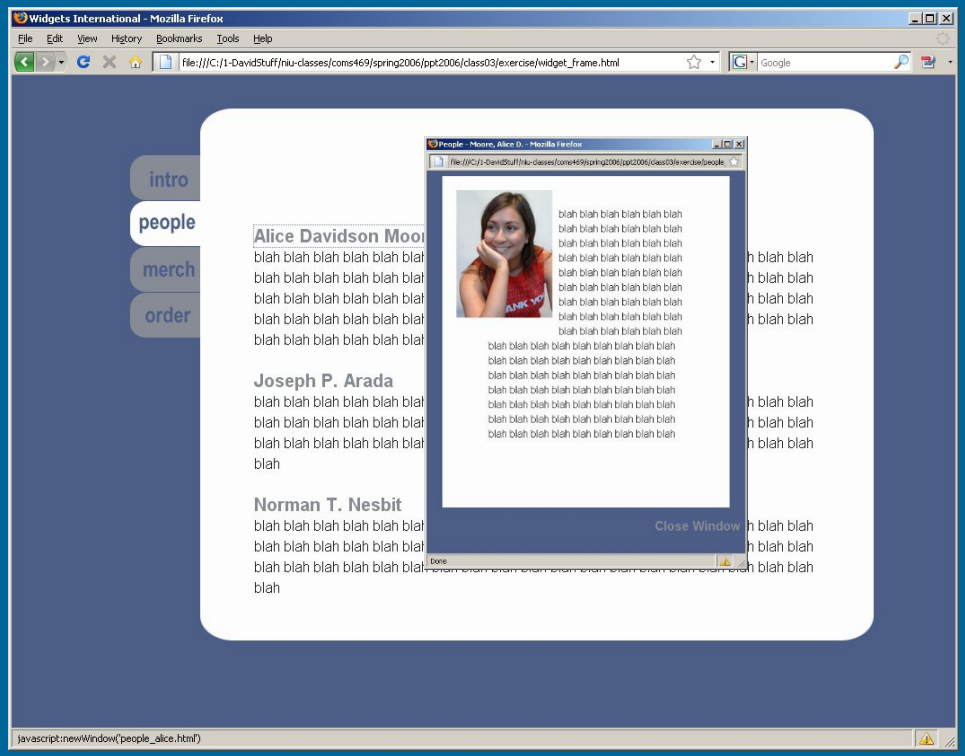
```html
<html>
<head>
<title>Test Yourself</title>
  <script type="text/javascript">
   function getScore()
     {
       var score=0;
       var answer = document.forms[0].userResponse.value;
       var myRegExp = /(Tim|T\.?)?( ?)?Berners(-?)?( ?)?Lee/i;
       var correct = answer.search(myRegExp);
       if (document.forms[0].elements[1].checked)
         {
           score++;
           document.firstQuestion.src = "images/okay.jpg";
         }
       else
         {
           document.firstQuestion.src = "images/error.jpg";
         }
       if (document.forms[0].elements[5].checked)
         {
           score++;
           document.secondQuestion.src = "images/okay.jpg";
         }
       else
         {
           document.secondQuestion.src = "images/error.jpg";
         }
       if (correct == 0)
         {
           score++;
           document.thirdQuestion.src = "images/okay.jpg";
         }
       else
         {
           document.thirdQuestion.src = "images/error.jpg";
         }
       document.forms[0].theScore.value = Math.round(score/3*100) + "%";
     }
   function clearImage()
     {
       document.firstQuestion.src = "images/blank.jpg";
       document.secondQuestion.src = "images/blank.jpg";
       document.thirdQuestion.src = "images/blank.jpg";
     }
  </script>
</head>
```

Windows & Frames

- Topics
  - Opening a new Window
  - Closing a Window
  - Passing Code Between Windows

Windows & Frames

- Opening new Windows



Windows & Frames

- open( )
  - Method of the window object
  - Opens a new browser window
  - Parameters
    - URL of the new window contents
    - Arbitrary name
    - height and width of the new window

Windows & Frames

- open( )

```
var newWindow;
newWindow = window.open( );
```

Basic form

```
var newWindow;
newWindow = window.open("jstalin.html","stalin","width=300,height=400");
```

With the three parameters

people_new.html

```
<html>
<head>
    <title>People</title>
    <script type="text/javascript">
        var newWindow;
        function openWindow(pageURL)
          {
            newWindow = window.open(pageURL,"gunkel","width=880,height=750");
            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="http://gunkelweb.com" onClick="return openWindow('http://gunkelweb.com')">
          D. Gunkel
        </a></li>

    <li><a href="josefstalin.html">
          Josef Stalin
        </a></li>
  </ul>
</blockquote>
</body>
</html>
```

Declare a variable called newWindow

Hyper Text Markup Language file | length : 935 lines : 33 | Ln : 1 Col : 7 Sel : 0 | 0 | Dos\Windows | ANSI as UTF-8 | INS

people_new.html

```
<html>
<head>
    <title>People</title>
    <script type="text/javascript">
        var newWindow;
        function openWindow(pageURL)
        {
            newWindow = window.open(pageURL,"gunkel","width=880,height=750");
            newWindow.focus();
            return false;
        }
    </script>
</head>

<body link="#5555dd" vlink="#
<blockquote>
<h1>People</h1>
<p>The people of the massive
their own mother if they had
third-world nations as is possible and squeeze every stinkin' penny from these struggling
economies.</p>
  <ul>
    <li><a href="http://gunkelweb.com" onClick="return openWindow('http://gunkelweb.com')">
            D. Gunkel
        </a></li>

    <li><a href="josefstalin.html">
            Josef Stalin
        </a></li>
  </ul>
</blockquote>
</body>
</html>
```

Define a function called openWindow which is called by the onClick event handler in the <body> of the document. The parameter pageURL will be supplied by the information provided by the event handler, in this case “http://gunkelweb.com”

Hyper Text Markup Language file | length : 935 lines : 33 | Ln : 1 Col : 7 Sel : 0 | 0 | Dos\Windows | ANSI as UTF-8 | INS

people_new.html

```
<html>
<head>
    <title>People</title>
    <script type="text/javascript">
        var newWindow;
        function openWindow(pageURL)
        {
            newWindow = window.open(pageURL,"gunkel","width=880,height=750");
            newWindow.focus();
            return false;
        }
    </script>
</head>

<body link="#5555dd" vlink="#5555dd">
<blockquote>
<h1>People</h1>
<p>The people of
their own mother
third-world nati
economies.</p>
  <ul>
    <li><a href=
            D. Gu
        </a></li

    <li><a href=
            Josef
        </a></li
  </ul>
</blockquote>
</body>
</html>
```

Use the open( ) method of the window object to open a new window. The contents of the new window will be the value passed to pageURL. The name of the new window will be "stalin." And the dimensions of the window will be 880 x 750. Assign all this to the newWindow variable. Apply the focus( ) method to the newWindow, so that it appears on top of the existing window. Return false to terminate the function.

Hyper Text Markup Language file | length : 935 lines : 33 | Ln : 1 Col : 7 Sel : 0 | 0 | Dos\Windows | ANSI as UTF-8 | INS

people_new.html

```
<html>
<head>
    <title>People</title>
    <script type="text/javascript">
        var newWindow;
        function openWindow(pageURL)
          {
            newWindow = window.open(pageURL,"gunkel","width=880,height=750");
            newWindow.focus();
            return false;
          }
    </script>
</head>

<body link="#5555dd" vlink
<blockquote>
<h1>People</h1>
<p>The people of the massi
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="http://gunkelweb.com" onClick="return openWindow('http://gunkelweb.com')">
          D. Gunkel
        </a></li>

    <li><a href="josefstalin.html">
          Josef Stalin
        </a></li>
  </ul>
</blockquote>
</body>
</html>
```

Modified anchor tag. Include an onClick event handler to call the function openWindow and pass it the value "http://gunkelweb.com" for the pageURL. This can also be a file name, i.e. "hopslam.html"

Hyper Text Markup Language file | length : 935 lines : 33 | Ln : 1 Col : 7 Sel : 0 | 0 | Dos\Windows | ANSI as UTF-8 | INS

people_new.html

people.html

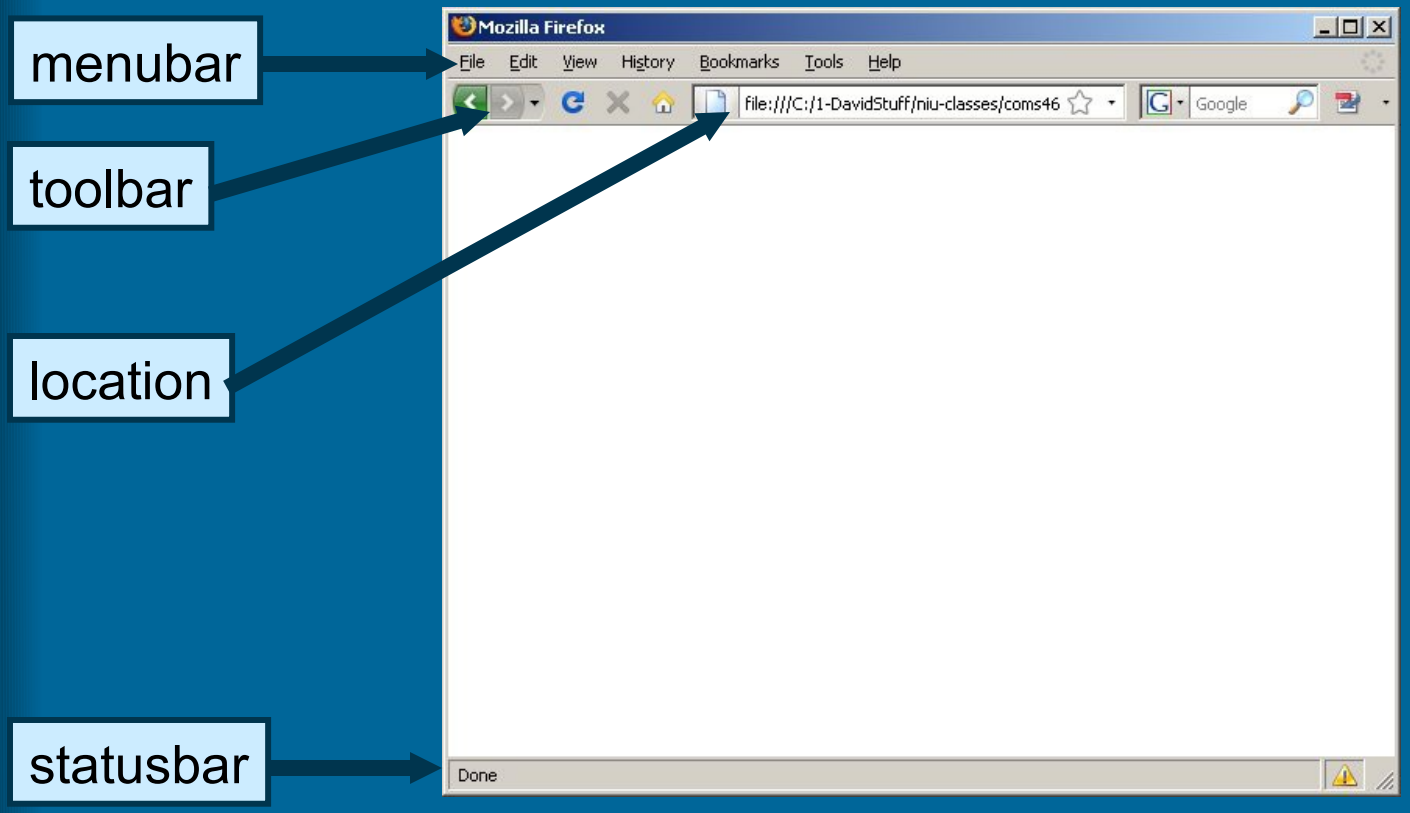
```
<html>
<head>
    <title>People</title>
    <script type="text/javascript">
        var newWindow;
        function openWindow(pageURL)
          {
            newWindow = window.open(pageURL,"gunkel","width=880,height=750");
            newWindow.focus();
            return false;
          }
    </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="http://gunkelweb.com" onClick="return openWindow('http://gunkelweb.com')">
            D. Gunkel
        </a></li>

    <li><a href="josefstalin.html">
            Josef Stalin
        </a></li>
  </ul>
</blockquote>
</body>
</html>
```

Hyper Text Markup Language file | length : 935 lines : 33 | Ln : 1 Col : 7 Sel : 0 | 0 | Dos\Windows | ANSI as UTF-8 | INS

Windows & Frames

window features

Window Feature	Possible values	Description
copyhistory	yes, no	Copy the history of the window doing the opening to the new window
directories	yes, no	Show directory buttons
height	integer	Height of the new window in pixels
left	integer	Position of the left window edge in screen pixels
location	yes, no	Show location text field
menubar	yes, no	Show the menu bar
resizable	yes, no	Enable the user to resize the window
scrollbars	yes, no	Show scroll bars if page is too long
status	yes, no	Show status bar
toolbar	yes, no	Show the tool bar
top	integer	Position of the top window edge in pixels
width	integer	Width of the new window in pixels


menubar
toolbar
location
statusbar
Mozilla Firefox
File Edit View History Bookmarks Tools Help
file:///C:/1-DavidStuff/niu-classes/coms46
Google
Done

people_new.html

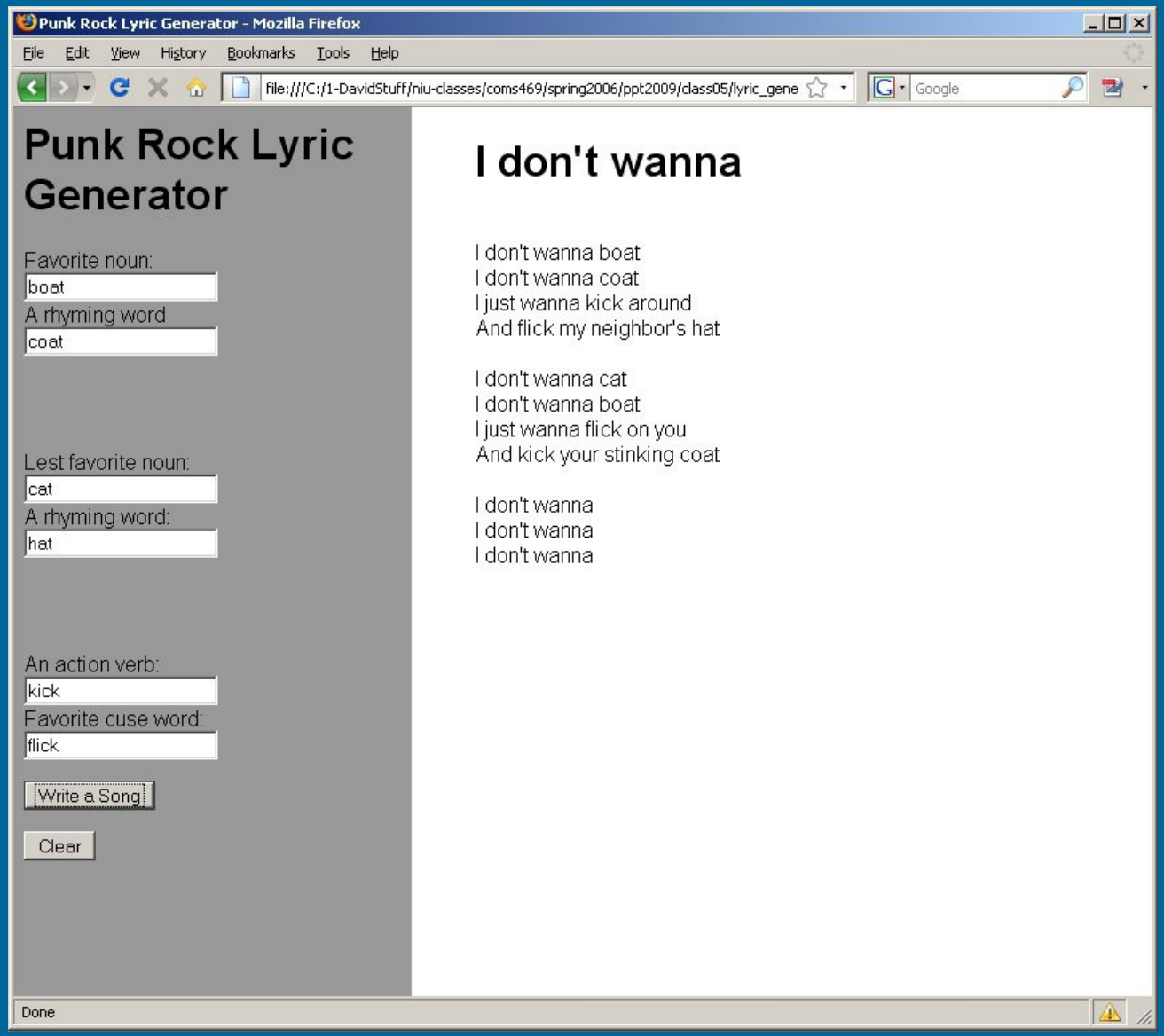
Modified people.html

```
<html>
<head>
   <title>People</title>
   <script type="text/javascript">
      var newWindow;
      function openWindow(pageURL)
        {
          newWindow = window.open(pageURL,"gunkel",
          "width=880,height=750,location=yes,menubar=yes,resizable=yes,toolbar=yes");
          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="http://gunkelweb.com" onClick="return openWindow('http://gunkelweb.com')">
          D. Gunkel
        </a></li>

    <li><a href="josefstalin.html">
          Josef Stalin
        </a></li>
  </ul>
</blockquote>
</body>
</html>
```

Hyper Text Markup Language file | length : 986 lines : 33 | Ln : 8 Col : 3 Sel : 0 | 0 | Dos\Windows | ANSI as UTF-8 | INS

Windows & Frames

- Passing Code
  - Write the content of one window to another
  - Pass the results of JavaScript (functions, variables, form data, etc.) from one window object to another
  - Dynamically generate content



lyric_generator.html

song_form.html

dynamically generated content

lyric_generator - Notepad

File Edit Format View Help

```
<html>
<head>
   <title>Punk Rock Lyric Generator</title>
</head>

<frameset cols="300,*" frameborder="0">

  <frame src="song_form.html" name="formFrame">

  <frame src="" name="resultsFrame">

</frameset>
</html>
```

Define a frameset. Make the right column 300 pixels and the right the remainder. The * is a wild card symbol.

lyric_generator - Notepad

File Edit Format View Help

```
<html>
<head>
   <title>Punk Ro
</head>

<frameset cols="300,*" frameborder="0">

  <frame src="song_form.html" name="formFrame">

  <frame src="" name="resultsFrame">

</frameset>
</html>
```

The first <frame> tag has the file "song_form.html" as the value of its src. We will write this page next.

lyric_generator - Notepad

File Edit Format View Help

```
<html>
<head>
   <title>Pu
</head>

<frameset co

  <frame src="song_form.html" name="formFrame">

  <frame src="" name="resultsFrame">

</frameset>
</html>
```

The second <frame> tag has an empty value for its src, meaning it has no HTML document loaded in it. The content of this frame will be written dynamically from the form and will be assigned to this frame via the "resultsFrame" name.

lyric_generator - Notepad

File Edit Format View Help

```
<html>
<head>
   <title>Punk Rock Lyric Generator</title>
</head>

<frameset cols="300,*" frameborder="0">

  <frame src="song_form.html" name="formFrame">

  <frame src="" name="resultsFrame">

</frameset>
</html>
```

lyric_generator.html

song_form - Notepad

File Edit Format View Help

song_form.html

```
<body bgcolor="#999999">
<h1>Punk Rock Lyric Generator</h1>
  <form>

   <p>Favorite noun:
   <br><input type="text" name="word1a">

   <br>A rhyming word
   <br><input type="text" name="word1b"></p>
   <br> 

   <p>Lest favorite noun:
   <br><input type="text" name="word2a">

   <br>A rhyming word:
   <br><input type="text" name="word2b"></p>
   <br> 

   <p>An action verb:
   <br><input type="text" name="verb1">

   <br>Favorite cuse word:
   <br><input type="text" name="verb2"></p>

   <p>
   <input type="button" value="Write a Song" onclick="writeSong()"></p>
   <p>
   <input type="reset" value="Clear" onclick="clearSong()"></p>

  </form>
</body>
</html>
```

The <body> of the document contains a form with six type=text input fields, each with a unique name. The form also includes two buttons that employ onclick event handlers to call the functions writeSong( ) and clearSong( )

File Edit Format View Help

song_form.html

```
<html>
<head>
<title>Song Form</title>
   <script type="text/javascript">

     function writeSong()
      {
        var word1a = document.forms[0].word1a.value;
        var word1b = document.forms[0].word1b.value;
        var word2a = document.forms[0].word2a.value;
        var word2b = document.forms[0].word2b.value;
        var verb1 = document.forms[0].verb1.value;
        var verb2 = document.forms[0].verb2.value;
        var resultsFrame = window.top.resultsFrame.document;

        resultsFrame.open();
        resultsFrame.write("<blockquote><h1>I don't wanna</h1>" +
                           "<br>I don't wanna " + word1a +
                           "<br>I don't wanna " + word1b +
                           "<br>I just wanna " + verb1 + " around " +
                           "<br>And " + verb2 + " my neighbor's " + word2b +
                           "<br><br>I don't wanna " + word2a +
                           "<br>I don't wanna " + word1a +
                           "<br>I just wanna " + verb2 + " on you " +
                           "<br>And " + verb1 + " your stinking " + word1b +
                           "<br><br>I don't wanna" +
                           "<br>I don't wanna" +
                           "<br>I don't wanna");
        resultsFrame.close();
      }

    function clearSong()
      {
        var res
        results
        results
        results
      }

   </script>
</head>
```

Define a function called writeSong( ), which will dynamically generate the song and write it to the right-hand frame that was named resultsFrame in the frameset document.

song_form.html

File Edit Format View Help

```
<html>
<head>
<title>Song Form</title>
   <script type="text/javascript">

     function writeSong()
     {
       var word1a = document.forms[0].word1a.value;
       var word1b = document.forms[0].word1b.value;
       var word2a = document.forms[0].word2a.value;
       var word2b = document.forms[0].word2b.value;
       var verb1 = document.forms[0].verb1.value;
       var verb2 = document.forms[0].verb2.value;
       var resultsFrame = window.top.resultsFrame.document;

       resultsFrame.open();
       resultsFrame.write("<blockquote><h1>I don't wanna</h1>" +
                          "<br>I don't wanna " + word1a +
                          "<br>I don't
                          "<br>I just w
                          "<br>And " +
                          "<br><br>I do
                          "<br>I don't
                          "<br>I just w
                          "<br>And " +
                          "<br><br>I do
                          "<br>I don't
                          "<br>I don't
       resultsFrame.close();
     }

    function clearSong()
     {
       var resultsFrame = window.top.resultsFrame.document;
       resultsFrame.open()
       resultsFrame.write(" ");
       resultsFrame.close();
     }

   </script>
</head>
```

Declare seven variables. The first six are assigned the values provided by the user on the form. The seventh variable, resultsFrame, is used to reference the document object contained in the resultsFrame window. This is necessary for writing content to this window.

File Edit Format View Help

song_form.html

Apply the open( ) method to the resultsFrame to begin writing content to it. The write( ) method will contain a number of string literals concatenated with the variables defined above. Conclude the function by applying the close( ) method to the resultsFrame

```
    var verb2 = document.forms[0].verb2.value;
    var resultsFrame = window.top.resultsFrame.document;

    resultsFrame.open();
    resultsFrame.write("<blockquote><h1>I don't wanna</h1>" +
                       "<br>I don't wanna " + word1a +
                       "<br>I don't wanna " + word1b +
                       "<br>I just wanna " + verb1 + " around " +
                       "<br>And " + verb2 + " my neighbor's " + word2b +
                       "<br><br>I don't wanna " + word2a +
                       "<br>I don't wanna " + word1a +
                       "<br>I just wanna " + verb2 + " on you " +
                       "<br>And " + verb1 + " your stinking " + word1b +
                       "<br><br>I don't wanna" +
                       "<br>I don't wanna" +
                       "<br>I don't wanna");
    resultsFrame.close();
  }

function clearSong()
  {
    var resultsFrame = window.top.resultsFrame.document;
    resultsFrame.open()
    resultsFrame.write(" ");
    resultsFrame.close();
  }

  </script>
</head>
```

File Edit Format View Help

song_form.html

```
<html>
<head>
<title>Song Form</title>
   <script type="text/javascript">

     function writeSong()
      {
        var word1a = document.forms[0].word1a.value;
        var word1b = document.forms[0].word1b.value;
        var word2a = document.forms[0].word2a.value;
        var word2b = document.forms[0].word2b.value;
        var verb1 = document.forms[0].verb1.value;
        var verb2 = document.forms[0].verb2.value;
        var resultsFrame = window.top.resultsFrame.document;

        resultsFrame.open();
        resultsFrame.write("<blockquote><h1>I don't wanna</h1>" +
                           "<br>I don't wanna " + word1a +
                           "<br>I don't wanna " + word1b +
                           "<br>I just wanna " + verb1 + " around " +
                           "<br>And " + verb2 + " my neighbor's " + word2b +
                           "<br><br>I don't wanna " + word2a +
```

Define a second function clearSong( ). Use the same approach to clear out the resultsFrame by writing an empty string to it.

```
        resultsFrame.close();
      }

    function clearSong()
      {
        var resultsFrame = window.top.resultsFrame.document;
        resultsFrame.open()
        resultsFrame.write(" ");
        resultsFrame.close();
      }

   </script>
</head>
```

File Edit Format View Help

song_form.html

```
<html>
<head>
<title>Song Form</title>
   <script type="text/javascript">

     function writeSong()
      {
        var word1a = document.forms[0].word1a.value;
        var word1b = document.forms[0].word1b.value;
        var word2a = document.forms[0].word2a.value;
        var word2b = document.forms[0].word2b.value;
        var verb1 = document.forms[0].verb1.value;
        var verb2 = document.forms[0].verb2.value;
        var resultsFrame = window.top.resultsFrame.document;

        resultsFrame.open();
        resultsFrame.write("<blockquote><h1>I don't wanna</h1>" +
                           "<br>I don't wanna " + word1a +
                           "<br>I don't wanna " + word1b +
                           "<br>I just wanna " + verb1 + " around " +
                           "<br>And " + verb2 + " my neighbor's " + word2b +
                           "<br><br>I don't wanna " + word2a +
                           "<br>I don't wanna " + word1a +
                           "<br>I just wanna " + verb2 + " on you " +
                           "<br>And " + verb1 + " your stinking " + word1b +
                           "<br><br>I don't wanna" +
                           "<br>I don't wanna" +
                           "<br>I don't wanna");
        resultsFrame.close();
      }

    function clearSong()
      {
        var resultsFrame = window.top.resultsFrame.document;
        resultsFrame.open()
        resultsFrame.write(" ");
        resultsFrame.close();
      }

   </script>
</head>
```

Cookies

- What are Cookies?
- Creating a cookie with JavaScript
- Accessing cookies
- Using cookies in web applications

Cookies

- Definition
  - A Cookie is a small text file that is stored on the end user's computer
  - The information contained in this file is set by the web designer/programmer
  - A Cookie can be referenced any time the user returns to your site

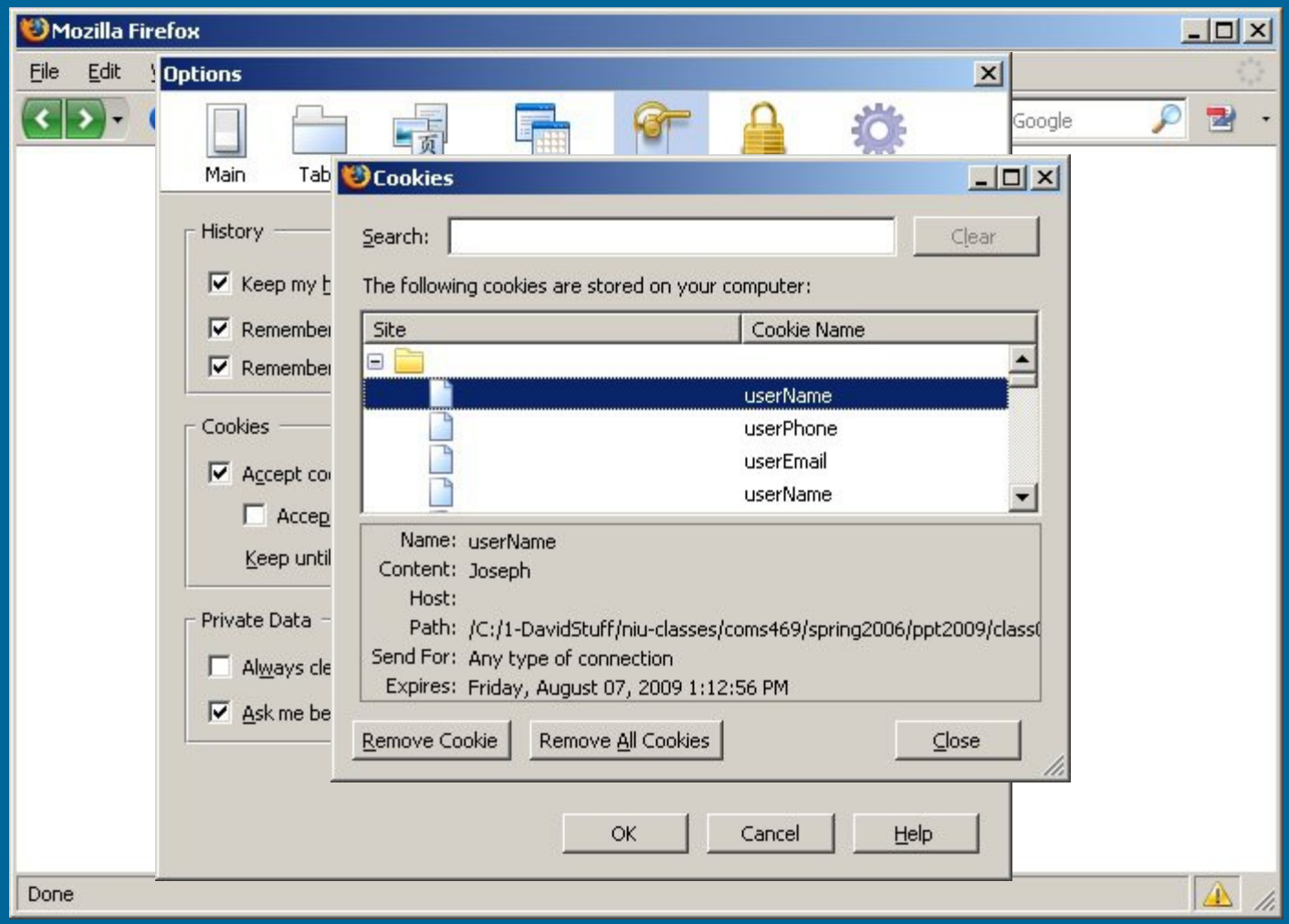
Cookies

- Function
  - A Cookie stores information on the user's machine
  - Cookies can be used to remember a user's name and password or to provide custom messages for each individual user
  - Cookies are useful for customizing web content
- What Cookies cannot do
  - Snoop on users
  - Transmit computer viruses

Cookies

- Inherent Limitations
  - A single site can only store 20 cookies on the user's computer
  - A cookie is site specific; only the site that set the cookie can access that cookie
  - A cookie can only store 4,096 characters
  - The user can disable or erase their cookies

Cookies


Mozilla Firefox
File
Edit
Options
Main
Tab
History
Keep my h
Remember
Remember
Cookies
Accept co
Accep
Keep until
Private Data
Always cle
Ask me be
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-DavidStuff/niu-classes/coms469/spring2006/ppt2009/class
Send For: Any type of connection
Expires: Friday, August 07, 2009 1:12:56 PM
Remove Cookie
Remove All Cookies
Close
OK
Cancel
Help
Google
Done

Cookies

Cookie File

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.▌▌.netscape.com     TRUE    /
FALSE   1066520432      NSCPHPAD1       set|1066520432375▌.netscape.com TRUE    /
FALSE   1066696832      adsPopup0       1066437631468▌.netscape.com     TRUE    /
FALSE   1093577159      sampler 1062818763▌www.newyorkfestivals.com     FALSE   /
FALSE   1097976311      ERUBE_ELE_NUM_PICS      24▌.google.com  TRUE    /
FALSE   2147368448      PREF
ID=692e230f732455b3:TM=1062822851:LM=1062822851:S=E2NH76dUCYuAHyS6▌webmail.niu.edu
FALSE   /servlet/       FALSE   1069017858      Cookie.Directory.view   1▌
themes.mozdev.org       FALSE   /       FALSE   1097974247      style   One▌
ads.specificpop.com     FALSE   /       FALSE   1609459199      id
1477932250▌.atdmt.com   TRUE    /       FALSE   1220572801      AA002
1062972629-1141314649/1064182433▌ads.specificpop.com    FALSE   /       FALSE
1609459199      fci     10-385-1-1065906168-1▌.insightfirst.com TRUE    /
FALSE   1097973632      aol072103       1441798▌.atwola.com     TRUE    /
FALSE   1097871515      badsrfi V0617c7cc4fc12e2fb3f8efd1b52c9▌
www.scrapbook-bytes.com FALSE   /       FALSE   1096809842      bbpassword
cb67df8224e578354d996e4f3207b061▌www.scrapbook-bytes.com        FALSE   /
FALSE   1068259480      defperpage      9▌www.scrapbook-bytes.com       FALSE   /
FALSE   1094403676      bblastvisit     1062867675▌www.scrapbook-bytes.com
FALSE   /       FALSE   1096809842      bbuserid        576▌.amazon.com TRUE    /
FALSE   1072425601      session-id      104-4686466-8959952▌.amazon.com TRUE    /
FALSE   2082787202      ubid-main       430-4398932-6151539▌.amazon.com TRUE    /
FALSE   1072425601      session-id-time 1072425600▌.amazon.com  TRUE    /
FALSE   2082787206      x-main  d5@zWIK9p7HTUeJriZWRIpqnCfesvBwU▌.fastclick.net
TRUE    /       FALSE   1066588208      m1
7619:3:21559:5142:1066415334|10789:1:24591:190:1066415378|10768:1:24528:7026:106641
5340|8113:1:18494:6225:1066415328|||||||||||||||||||||||▌.fastclick.net  TRUE    /
FALSE   1066506983      m3
5902:1:14092:1632:1066334177|||||||||||||||||||||||||▌.tribalfusion.com TRUE    /
FALSE   2145916801      ANON_ID NFMCFLMHLNUU▌.fastclick.net     TRUE    /
FALSE   1067020086      m2
9504:1:21549:5:1066415284|10596:1:24202:26:1065905008|||||||||||||||||||||||||▌
.fastclick.net  TRUE    /       FALSE   1125179992      pluto   832750184|0|▌
```

Cookies

- Components - Required
  - name and content
    - name identifies the cookie for future use
    - content is the stored information
  - expires
    - Sets an expiration date - Tue, 15 Feb 2010 00:00:00
    - Default setting – the cookie persists only as long as the session during which it was created

Cookies

- Components - Optional
  - domain
    - URL of the site where the cookie is accessible
  - path
    - Subdirectory name where the cookie is accessible
  - secure
    - Boolean value – true or false
    - Works with SSL

Cookies

- Creating a Cookie
  - cookie property of the document object
    - *cookie string*

```
document.cookie = “userName=Larry; expires=“Tue 15 Feb 2010 00:00:00;”;
```

name *content* *expires*

cookie1 - Notepad

File Edit Format View Help

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

  <script type="text/javascri

     var expireDate = new Dat
     expireDate.setMonth(expi

  </script>

</head>

<body bgcolor="#ffffff">

  <script type="text/javascri

     var userName = window.pr
     document.cookie = "userN                                    g();

  </script>

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

</body>
</html>
```

Write a Cookie - Mozilla Firefox

File Edit View History Bookmarks Tools Help

file:///C:/1-DavidStuff/niu-classes/coms469, Google

[JavaScript Application]

Please enter your name.

Ada Augusta Byron

OK Cancel

Done

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

  <script typ

     var user
     document                                                    ();

  </script>

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

</body>
</html>
```

Declare and initialize a variable

Create a new instance of the Date object and assign it to the variable expireDate. Set the expiration date 6 months in the future. Do this by using the getMonth( ) method to obtain the number of the month of the expireDate object and add 6 to it. Then use the setMonth( ) method to set the month of expireDate to this new value.

cookie1 - Notepad

File Edit Format View Help

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

  <script type="text/javascript">

     var expireDate = new Date;
     expireDate.setMonth(exp

  </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>
```

Declare a variable userName.

The value of this variable will be set by the user's response to a prompt, which is created by using the prompt() method of the window object.

cookie1 - Notepad

File Edit Format View Help

Write the cookie.

Do this by setting the cookie property of the document object to a text string. In this case, the cookie has two pieces of information userName and expires.

The value of userName is set to userName, which is the information entered by the user.

The value of expires is set to expireDate, which is established above. The toGMTString( ) method converts the expireDate object into a text string so that it can be written into the cookie.

```
<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>
```

cookie1 - Notepad

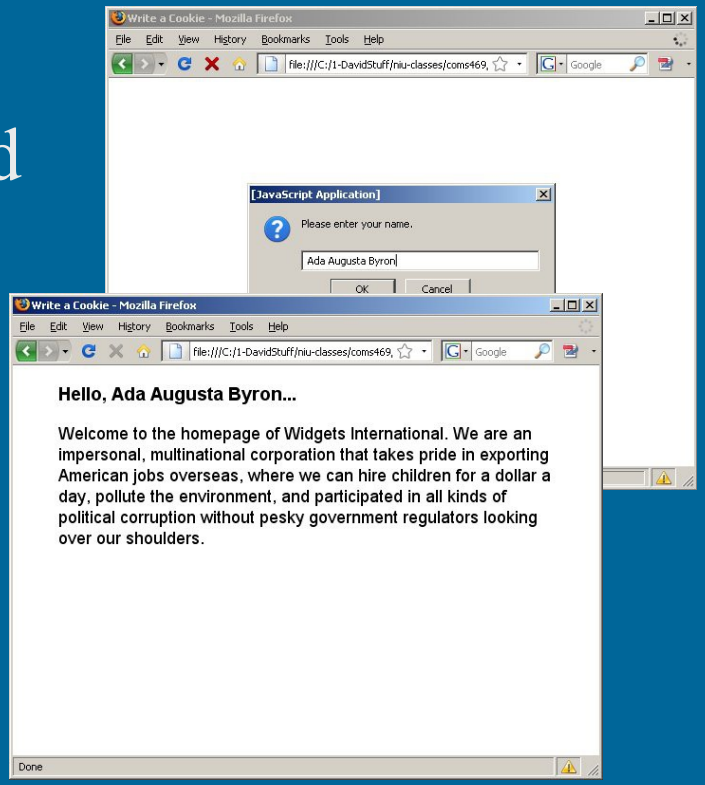
File Edit Format View Help

```
<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>
```

cookie1.html

Cookies

- Reading a Cookie
  - Extract information held in a cookie and use it to display a custom message
  - Personalize/Customize web content



cookie2 - Notepad

File Edit Format View Help

```
<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>
```

Use a conditional statement to test whether the **userName** element of the **cookie** property of the **document** object is NOT null. In other words, make sure there is a value for the **userName** in the cookie.

cookie2 - Notepad

File Edit Format View Help

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

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

  <script type="text/javascri

    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>
```

If there is a value for the **userName**, then use the **write()** method of the **document** object to write out a greeting. The greeting is composed of string data concatenated with the value of the **userName** stored in the cookie.

cookie2 - Notepad

File Edit Format View Help

```
<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
Welcome
multinat
where we
particip
regulato
</blockq

</body>
</html>
```

The value of the userName is extracted from the cookie by applying the split( ) method to the cookie property of the document object. The split("=") divides the cookie's name=value pair into two parts along the equals sign. [0] is the name and [1] is its value. In this case, we splitting the cookie at the equals sign and extracting the value assigned to the userName.

cookie2 - Notepad

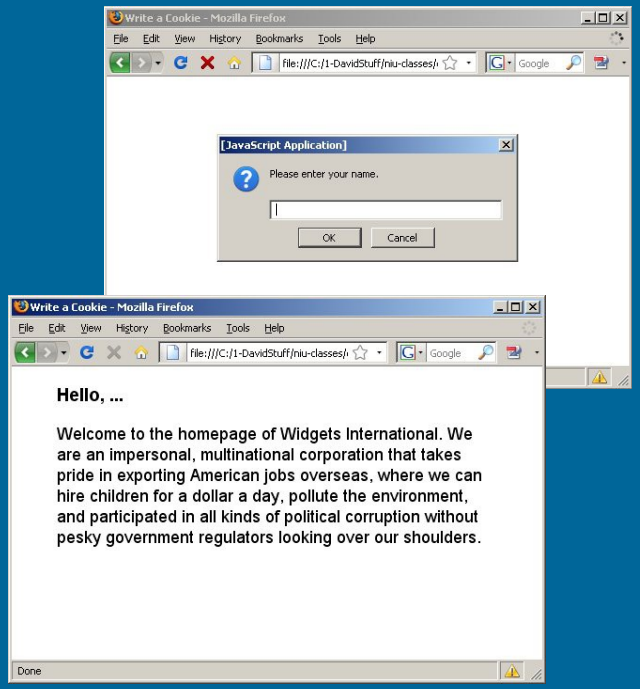
File Edit Format View Help

```
<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>
```

cookie2.html

Cookies - Applications

- Potential Problem
  - The previous example does not require the user to enter data
  - User can circumvent the prompt
- Solution
  - Add a conditional statements
  - The conditional will specify different actions for situations where the user does not enter a name in the prompt dialogue box



cookie3 - Notepad

File Edit Format View Help

Modify cookie1.html

Add a conditional statement to the <body> of the document.
If there is a userName, then create the cookie and use the write() method of the document object to write out a text string with a link to the next page.
If there is no userName, then use the write() method of the document object to write out a text string with a link to the current page. This will return the user to the page with the prompt.

```
<html>
<head>
 <title

  <scri

     va
     ex

  </scr

</head>

<body b

  <script type="text/javascript">

    var userName = window.prompt("Please enter your name.","");

    if (userName)
     {
       document.cookie = "userName="+userName+";expires="+expireDate.toGMTString();
       document.write("Thank you for the information." +
                      "You may now <a href='cookie2.html'>enter</a>.");
     }

    else
     {
       document.write("You must enter a name. Return to the " +
                      "<a href='cookie3.html'>first page</a>.");
     }

  </script>

</body>
</html>
```

cookie3 - 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.","");

     if (userName)
      {
        document.cookie = "userName="+userName+";expires="+expireDate.toGMTString();
        document.write("Thank you for the information." +
                       "You may now <a href='cookie2.html'>enter</a>.");
      }

     else
      {
        document.write("You must enter a name. Return to the " +
                       "<a href='cookie3.html'>first page</a>.");
      }

  </script>

</body>
</html>
```

cookie3.html

Next step:
How do you accommodate return visits? How do you recognize users who already have a cookie without requiring them to fill in the prompt?

cookie4 - 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">

   if (document.cookie != "")
     {
        document.write("<h3>" + document.cookie.split("=")[1] + " ...click here to "+
                       "<a href='cookie2.html'>enter<\/a>.</h3>");
     }

   else
     {
        var userName = window.prompt("Please enter your name.","");

        if (userName)
         {
           document.cookie = "userName="+userName+";expires="+expireDate.toGMTString();
           document.write("Thank you for the information." +
                          "You may now <a href='cookie2.html'>enter<\/a>.");
         }

        else
         {
           document.write("You must enter a name. Return to the " +
                          "<a href='cookie3.html'>first page<\/a>.")
         }
     }
  </script>

</body>
</html>
```

Write a Cookie - Mozilla Firefox

File Edit View History Bookmarks Tools Help

file:///C:/1-Dav

Ada Augusta Byron ...click here to enter.

file:///C:/1-DavidStuff/niu-classes/coms469/spring2006/ppt2009/class06/cook...

cookie4 - Notepad

File Edit Format View Help

```
<html>
<head>
 <title>Write

  <script typ

     var exp
     expireDa

  </script>

</head>

<body bgcolor

  <script type="text/javascript">

   if (document.cookie != "")
     {
        document.write("<h3>" + document.cookie.split("=")[1] + " ...click here to "+
                       "<a href='cookie2.html'>enter<\/a>.</h3>");
     }

   else
     {
        var userName = window.prompt("Please enter your name.","");

        if (userName)
         {
           document.cookie = "userName="+userName+";expires="+expireDate.toGMTString();
           document.write("Thank you for the information." +
                          "You may now <a href='cookie2.html'>enter<\/a>.");
         }

        else
         {
           document.write("You must enter a name. Return to the " +
                          "<a href='cookie3.html'>first page<\/a>.")
         }
     }
  </script>

</body>
</html>
```

Add another conditional.

Use a modified form of the script from cookie2.html. This line checks to see whether there is a cookie. If the cookie value is not empty, then a text string is written and the prompt is bypassed. If not (else), then the user is prompted to enter a userName.

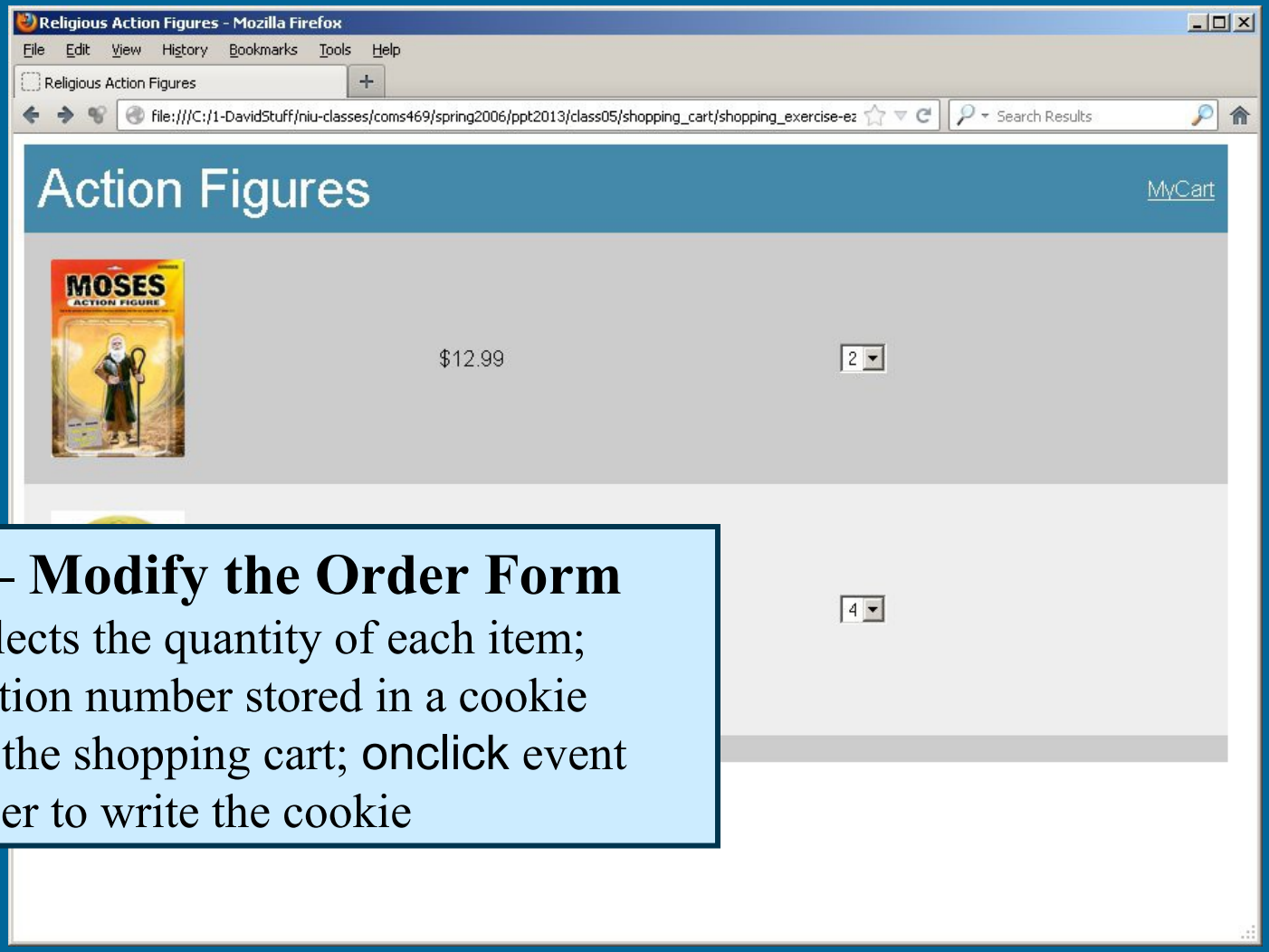
cookie4 - Notepad

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">

   if (document.cookie != "")
     {
        document.write("<h3>" + document.cookie.split("=")[1] + " ...click here to "+
                       "<a href='cookie2.html'>enter<\/a>.</h3>");
     }

   else
     {
        var userName = window.prompt("Please enter your name.","");

        if (userName)
         {
           document.cookie = "userName="+userName+";expires="+expireDate.toGMTString();
           document.write("Thank you for the information." +
                          "You may now <a href='cookie2.html'>enter<\/a>.");
         }

        else
         {
           document.write("You must enter a name. Return to the " +
                          "<a href='cookie3.html'>first page<\/a>.")
         }
     }
  </script>

</body>
</html>
```

cookie4.html

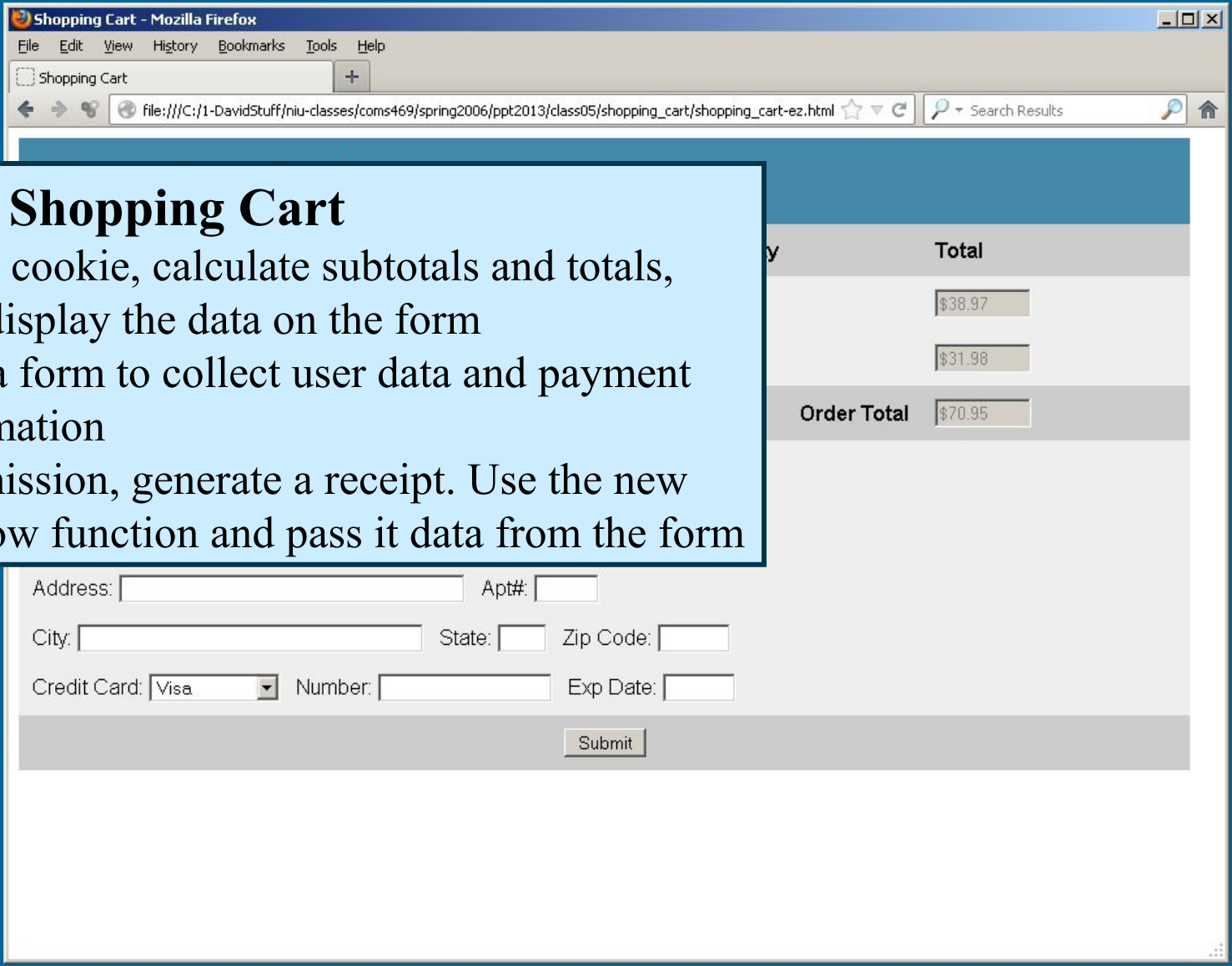
Shopping Cart Exercise



Page 1 – Modify the Order Form

- User selects the quantity of each item; Selection number stored in a cookie
- Link to the shopping cart; onclick event handler to write the cookie

Shopping Cart Exercise



Page 2 – Shopping Cart

- Read the cookie, calculate subtotals and totals, and display the data on the form
- Include a form to collect user data and payment information
- On submission, generate a receipt. Use the new window function and pass it data from the form

Shopping Cart Exercise

Shopping Cart - Mozilla Firefox

File Edit View History Bookmarks Tools Help

Mozilla Firefox

file:///C:/1-DavidStuff/niu-classes/coms469/spring2006/ppt2013/class05/shopping_cart/shop

Thank You

$70.95 will be charged to your Discover card.
Expiration Date: 04/14

Your order will be sent to:
Norbert Wiener
5424 N. Clark Street Apt #45
Chicago IL 60621

Item

Moses A

Jesus A

Shippin

First Nar

Address

City: State: Zip Code:

Credit Card: Visa Number: Exp Date:

Submit

Religious Action Figures - Mozilla Firefox

File Edit View History Bookmarks Tools Help

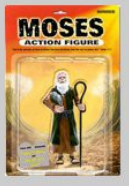
Religious Action Figures

file:///C:/1-DavidStuff/niu-classes/coms469/spring2006/ppt2013/class05/shopping_cart/shopping_exercise-ez

Search Results

Action Figures

MyCart



$12.99

2

$15.99

Page 1

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-ez.html

Search Results

Shopping Cart

Item	Price	Quantity	Total
Moses Action Figure	$12.99	3	$38.97
Jesus Action Figure	$15.99	2	$31.98
		Order Total	$70.95

Shipping and Payment Information

First Name: Last Name:

Address: Apt#:

City: State: Zip Code:

Credit Card: Visa Number: Exp Date:

Submit

Page 2

Religious Action Figures - Mozilla Firefox

File Edit View History Bookmarks Tools Help

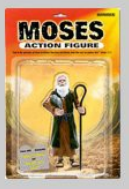
Religious Action Figures

file:///C:/1-DavidStuff/niu-classes/coms469/spring2006/ppt2013/class05/shopping_cart/shopping_exercise-ez

Search Results

Action Figures

MyCart



$12.99

2

$15.99

Page 1

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-ez.html

Search Results

Shopping Cart

Item	Price	Quantity	Total
Moses A			97
Jesus Ac			98
			95

Shipping

First Nam

Address:

City:

Credit Ca

Mozilla Firefox

file:///C:/1-DavidStuff/niu-classes/coms469/spring2006/ppt2013/class05/shopping_cart/shop

Thank You

$70.95 will be charged to your Discover card.
Expiration Date: 04/14

Your order will be sent to:
Norbert Wiener
5424 N. Clark Street Apt #45
Chicago IL 60621

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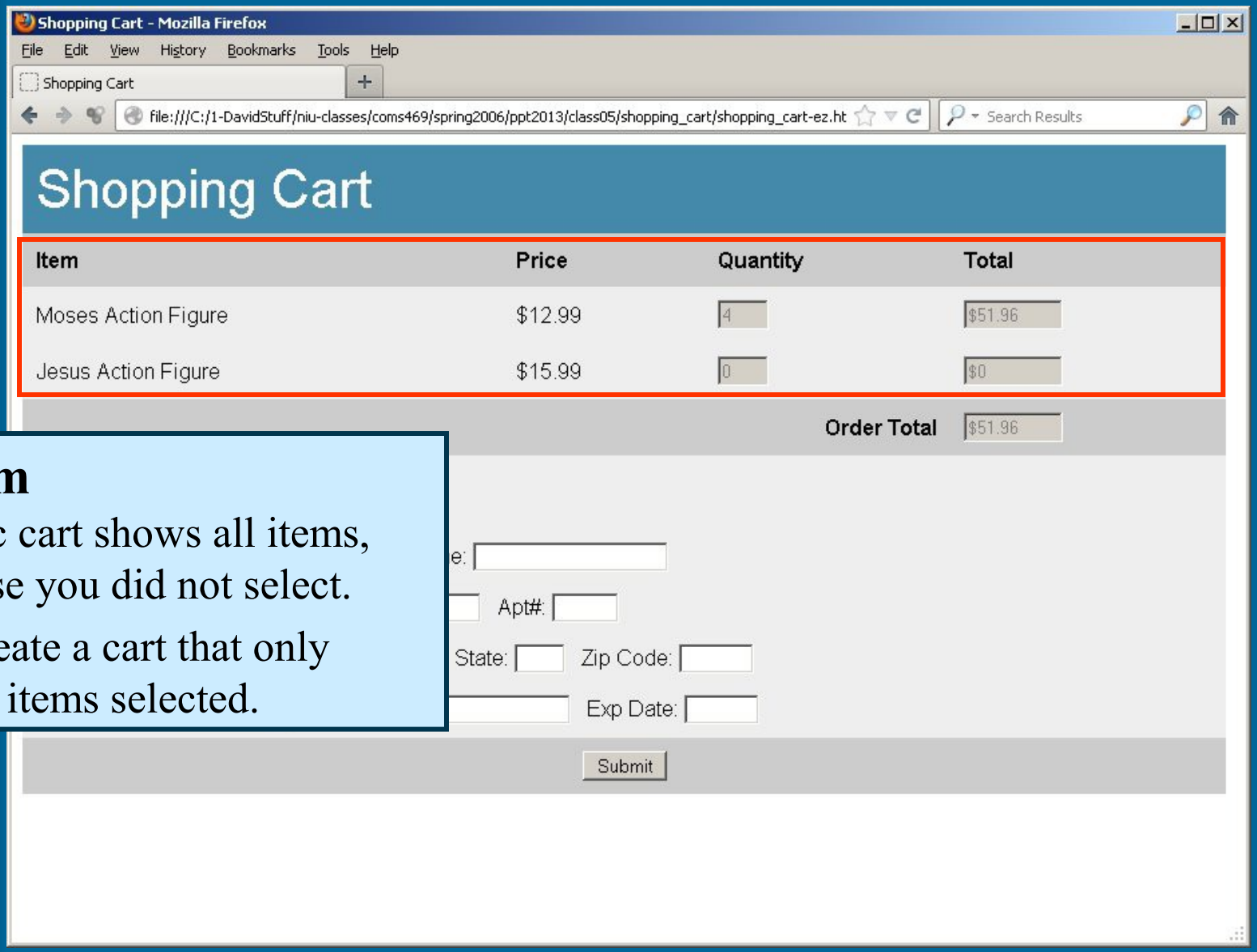

Problem

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

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

Advanced Version

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	4	$51.96
		Order Total	$51.96

Shipping and Payment Information

First Name: Last Name:

Address: Apt#:

City: State: Zip Code:

Credit Card: Visa Number: Exp Date:

Submit

Preview

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