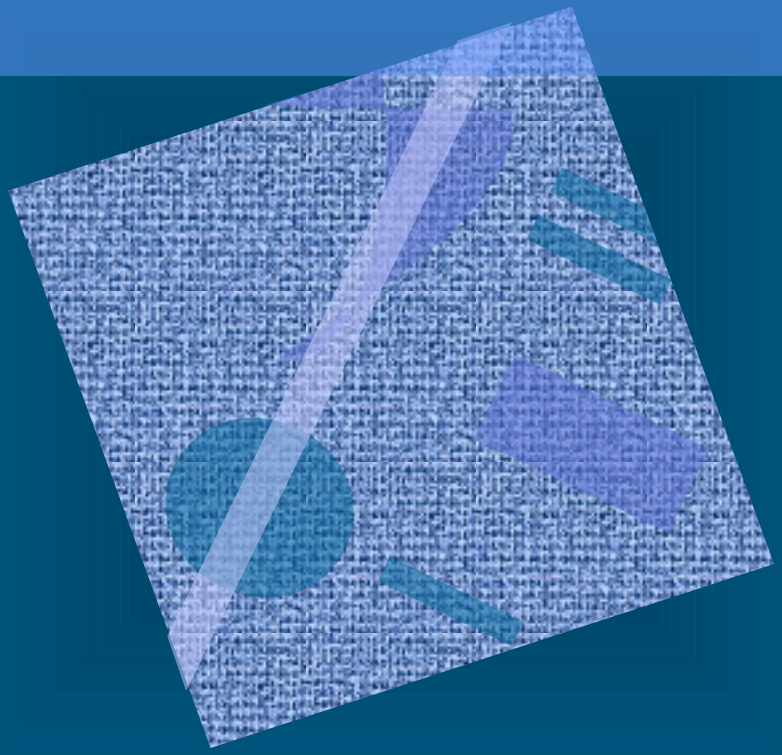
COMS 469: Interactive Media II

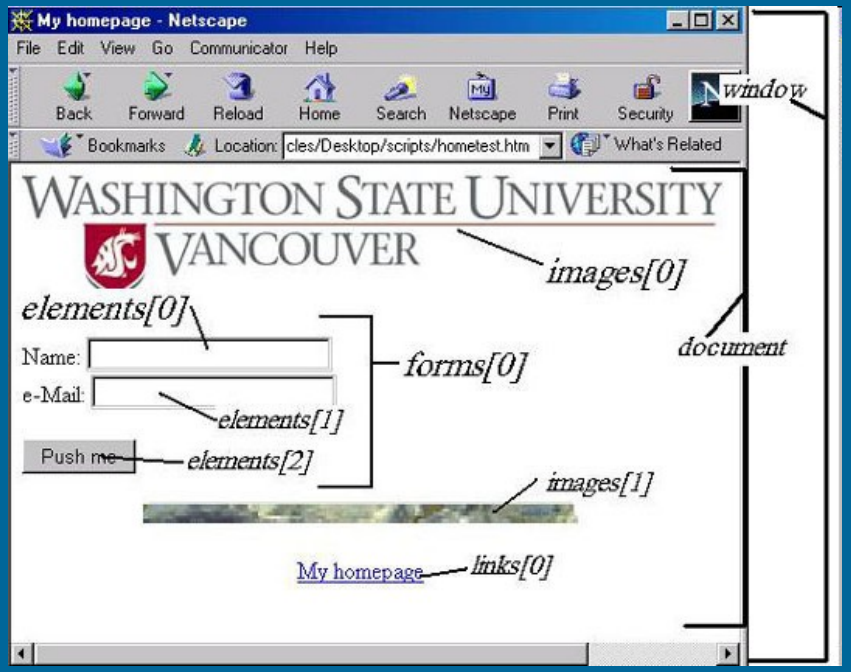


Agenda

- Review
- Ch. 7: HTML Forms
- Ch. 9: String Manipulation

Review

- Object Oriented Programming
- JavaScript Native Objects
- Browser Objects



Review

- OOP Terminology
  - *Object*
  - *Properties*
  - *Methods*

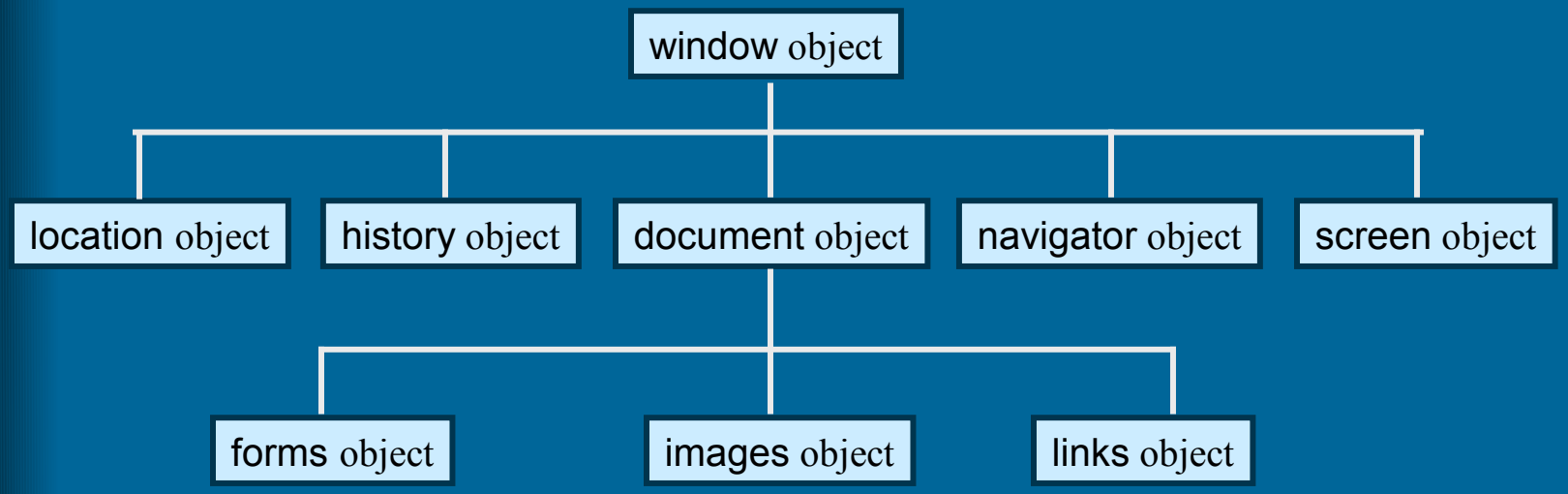
object = car
property = black
methods = drive, reverse, turn, break

JavaScript Native Objects

Objects	Properties	Methods
String	length	charAt( ) charCodeAt( ) fromCharCode( ) indexOf( ) lastIndexOf( ) substr( ) substring( ) toLowerCase( ) toUpperCase( )
Math		abs( ) ceil( ) floor( ) round( ) random( ) pow( ) toFixed( )
Array	length	concat( ) slice( ) sort( ) reverse( ) join( )
Date		getDate( ) getDay( ) getMonth( ) getFullYear( ) toDateString( ) setDate( ) setMonth( ) setFullYear( ) getHours( ) getMinutes( ) getSeconds( ) getMilliseconds( ) toTimeString( ) setHours( ) setMiniutes( ) setSeconds( )

Review

- Browser Objects – BOM



Common elements of the JavaScript BOM

Objects are arranged in an hierarchical order

Browser Objects

Object	Properties	Methods
window	defaultStatus	alert( )
history		back( ) forward( ) go(*n*)
location	href	replace( )
navigator		
screen	height width colorDepth	
document	forms[ ] images[ ] links[ ]	

Review

- Examples

random_quote - Notepad

File Edit Format View Help

```
<html>
<head>
 <title>Random Quotation Generator</tit
</head>

<body bgcolor="#ffffff">

  <script type="text/javascript">

        var quoteNumber;

        var quote = new Array("Pabst","C
                              "Meister B

        var arrayLength = quote.length -

        quoteNumber = Math.round(Math.ra

        document.write("<h1>" + quote[qu

  </script>

</body>
</html>
```

the_date - Notepad

File Edit Format View Help

```
<html>
<head>
 <title>What's the Date</title>
</head>

<body bgcolor="#ffffff">

  <script type="text/javascript">

    var months = new Array("January"
                           "May","Jun
                           "October"
    var dateNow = new Date();
    var yearNow = dateNow.getFullYear
    var monthNow = months[dateNow.get
    var dayNow = dateNow.getDate();
    var daySuffix;

    switch (dayNow)
     {
       case 1:
       case 21:
       case 31:
         daySuffix = "st";
         break;

       case 2:
       case 22:
         daySuffix = "nd";
         break;

       case 3:
       case 23:
         daySuffix = "rd";
         break;

       default:
         daySuffix = "th";
         break;
      }

    document.write("<h2>Today is the " + dayNow + daySuffix +
                   " of " + monthNow + " " + yearNow + "</h2>");

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

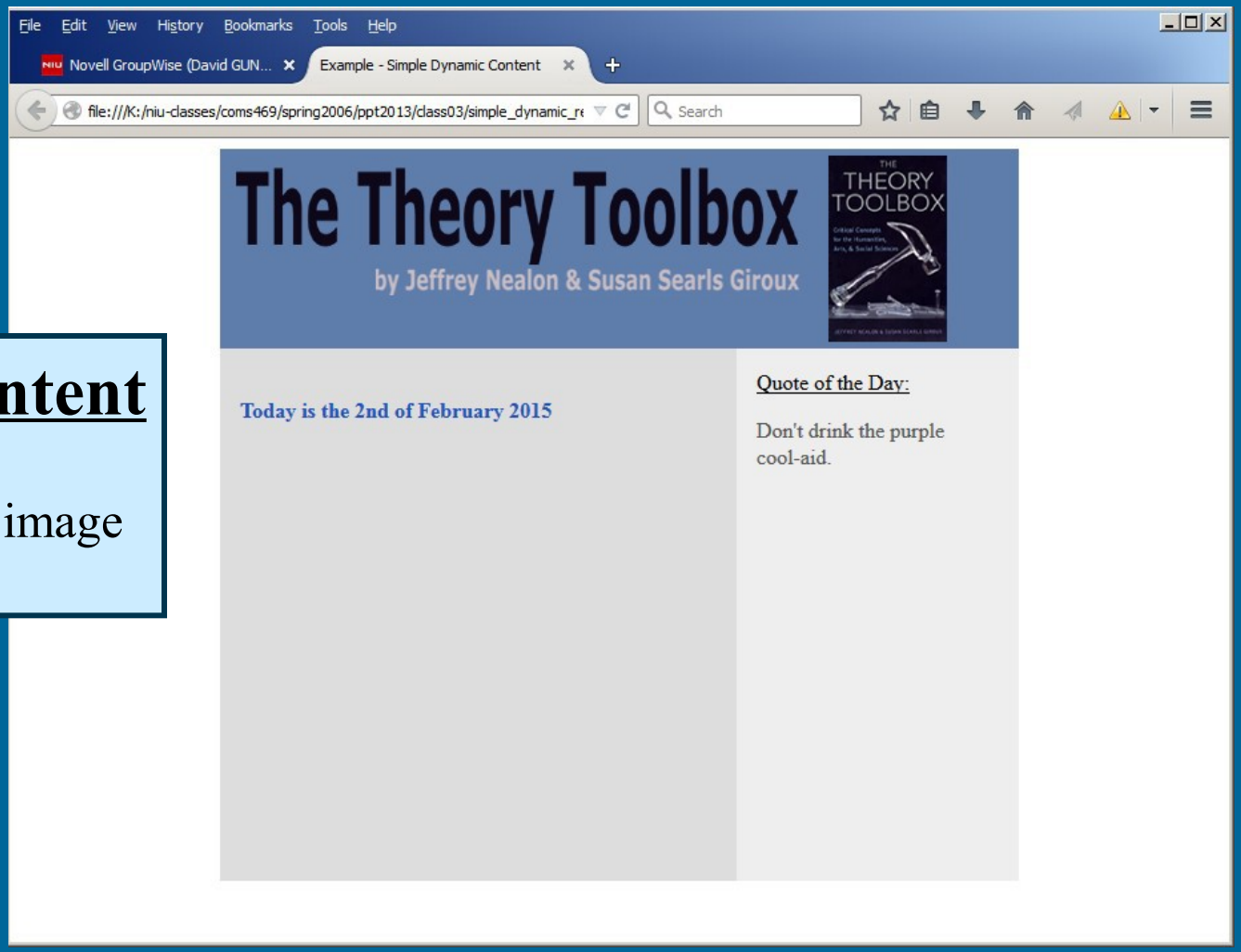
random_image - Notepad

File Edit Format View Help

```
<html>
<head>
 <title>Random Banner Image</title>

  <script type="text/javascript">

    function selectImage()
     {
       var bannerImg = new Array("banner1.jpg","banner2.jpg","banner3.jpg");

       var arrayLength = bannerImg.length;

       randomNumber = Math.round(Math.random() * arrayLength);

       document.banner.src = bannerImg[randomNumber];
     }

  </script>

</head>

<body bgcolor="#ffffff" onLoad="selectImage()">

  <img src="banner1.jpg" width="600" height="150" name="banner">

</body>
</html>
```

Dynamic Content

Random quote
Random banner image
Current date



simple_dynamic_revised.html

```
1  <html>
2  <head>
3    <title>Example - Simple Dynamic Content</title>
4    <script type="text/javascript">
5      function selectImage()
6       {
7         var bannerImg = new Array("banner1.jpg","banner2.jpg","banner3.jpg");
8         var arrayLength = bannerImg.length;
9         randomNumber = Math.round(Math.random() * arrayLength);
10        document.banner.src = bannerImg[randomNumber];
11      }
12
13      var months = new Array("January","February","March","April","May","June","July",
14                             "August","September","October","November","December");
15     var dateNow = new Date();
16     var yearNow = dateNow.getFullYear();
17     var monthNow = months[dateNow.getMonth()];
18     var dayNow = dateNow.getDate();
19     var daySuffix;
20
21     switch (dayNow)
22      {
23        case 1:
24        case 21:
25        case 31:
26          daySuffix = "st";
27          break;
28
29        case 2:
30        case 22:
31          daySuffix = "nd";
32          break;
33
34        case 3:
35        case 23:
36          daySuffix = "rd";
37          break;
38
39        default:
40          daySuffix = "th";
41          break;
42       }
43   </script>
44 </head>
```

Hyper Text Markup Language file | length : 2443 lines : 93 | Ln : 38 Col : 11 Sel : 0 | 0 | Dos\Windows | ANSI as UTF-8 | INS

selectImage function for the randomly selected banner image

Variables and **switch** statement to define the various elements that comprise the date

simple_dynamic_revised.html

```
45
46  <body bgcolor="#ffffff" onLoad="selectImage()">
47  <p align="center">
48
49    <table width="600" cellspacing="0" cellpadding="0" border="0">
50
51     <tr>
52       <td colspan="2" align="center"> <img src="banner1.jpg" width="600" height="150" name="banner">
         </td>
53     </tr>
54
55     <tr height="400">
56       <td width="400" bgcolor="#dddddd" style="padding:15px" valign="top">
57
58         <script type="text/javascript">
59
60           document.write("<h4 style='color:#2255bb'>Today is the " + dayNow + daySuffix +
61                          " of " + monthNow + " " + yearNow + "</h4>");
62         </script>
63       </td>
64
65       <td width="200" bgcolor="#eeeeee" style="padding:15px" valign="top">
66
67         <p style="color:"#000000"><u>Quote of the Day:</u>
68
69         <script type="text/javascript">
70
71       var quoteNumber;
72       var quote = new Array("Never trust a hippie.","Don't drink the purple cool-aid.",
73                             "Prophets of doom are always correct","Keep off the grass");
74
75         var arrayLength = quote.length - 1;
76           quoteNumber = Math.round(Math.random() * arrayLength);
77           document.write("<p style='color:#555555'>" + quote[quoteNumber] + "</p>");
78
79         </script></p>
80
81         </td>
82     </tr>
83    </table>
84  </body>
85  </html>
```

onLoad to call selectImage function

Use a table to provide page formating

Display the date by using a document.write( )

Generate and display the random quotation

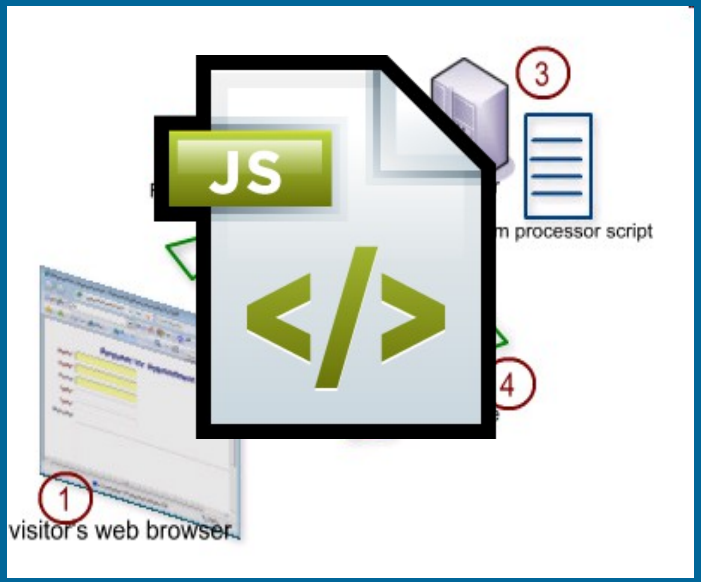
Hyper Text Markup Language file | length : 2425 lines : 85 | Ln : 57 Col : 1 Sel : 0 | 0 | Dos\Windows | ANSI as UTF-8 | INS

HTML Forms

- Introduction
- Review of HTML Forms
- JavaScript objects, properties and methods for working with HTML forms
- Examples/Exercises

HTML Forms

- Introduction
  - Online Forms
    - *Front End* = HTML form to collect user data
    - *Back End* = PHP or ASP to process form data
  - JavaScript
    - In between Front & Back ends
    - Function
      - Verify/Validate form entry data
      - Client-side processing of form data (i.e. trivia quiz)



HTML Forms

- Introduction
  - Example

Name
Address
City
State
Phone

HTML Forms

- Introduction
  - Example

Name Tom Verlaine
Address
City
State New York
Phone 298-4571

HTML Forms

- Introduction
  - Example

Name Tom Verlaine
Address
City
State New York
Phone 298-4571

- Use JavaScript to verify that the user entered data into each field (no empty fields)
- Use JavaScript to check the validity of the data before the form is sent.
- Prompt the user to fix any mistakes or problems.
- Avoid having to deal with “bad” data. Make the user enter the right kind of data.

Firefox

NIU Novell WebAccess (Da

Fill in the F

Name

Password

Species:
- Human
- Canine
- Penguin

Organs for Sale
- Brain
- Liver
- Lungs

Hobbies

Tree-House Astrolo

Essay

What I did on m

Send Reset

basic_form.html

```
<html>
  <head>
    <title>Example Form</title>
  </head>
<body>

<form method="post" action="page3-1.php">
<h2>Fill in the Form</h2>

<p><b>Name</b>
<br><input type="text" name="user_name
</p>

<p><b>Password</b>
<br><input type="password" name="passw

<p><b>Species:</b>
<br><input type="radio" name="species"
<br><input type="radio" name="species"
<br><input type="radio" name="species"

<p><b>Organs for Sale</b>
<br><input type="checkbox" name="for_sale[]" value="brain"> Brain
<br><input type="checkbox" name="for_sale[]" value="liver"> Liver
<br><input type="checkbox" name="for_sale[]" value="lungs"> Lungs</p>

<p><b>Hobbies</b>
<br><select name="hobbies">
  <option value="tree-house astrology">Tree-House Astrology</option>
  <option value="backyard surgery">Backyard Surgery</option>
  <option value="rodent cloning">Rodent Cloning</option>
</select>

<p><b>Essay</b>
<br><textarea name="meaning_life" rows="6" cols="40" wrap="physical">
What I did on my summer vacation...
</textarea></p>

<input type="hidden" name="my_email" value="email@niu.edu">
<p><input type="submit" value="Send"> <input type="reset"></p>
</form>
</body>
</html>
```

The form is defined by the **form** container tag. This tag takes two attributes: **method** and **action**. For now we will not be concerned with the **action**; this is where serverside scripting (i.e. **php**) comes in and we will deal with it later in the semester.

basic_form.html

```
<html>
  <head>
    <title>Example Form</title>
  </head>
<body>

<form method="post" action="page3-1.php">
<h2>Fill in the Form</h2>

<p><b>Name</b>
<br><input type="text" name="user_name" size="40">
</p>

<p><b>Organs for Sale</b>
<br><input type="checkbox" name="for_sale[]" value="brain"> Brain
<br><input type="checkbox" name="for_sale[]" value="liver"> Liver
<br><input type="checkbox" name="for_sale[]" value="lungs"> Lungs</p>

<p><b>Hobbies</b>
<br><select name="hobbies">
  <option value="tree-house astrology">Tree-House Astrology</option>
  <option value="backyard surgery">Backyard Surgery</option>
  <option value="rodent cloning">Rodent Cloning</option>
</select>

<p><b>Essay</b>
<br><textarea name="meaning_life" rows="6" cols="40" wrap="physical">
What I did on my summer vacation...
</textarea></p>

<input type="hidden" name="my_email" value="email@niu.edu">
<p><input type="submit" value="Send"> <input type="reset"></p>
</form>
</body>
</html>
```

Entry fields are created by using the **<input>** tag. This tag takes the attributes **type**, **name**, and **size**. In this case, the **type** is **text**, which provides a single line for text entry. The **name** is "**user_name**" and the size, which specifies the size of the field in characters, is 40.

Firefox

NIU Novell WebAccess (Da

Fill in the F

Name

Password

Species:

- Human
- Canine
- Penguin

Organs for Sale

- Brain
- Liver
- Lungs

Hobbies

Tree-House Astrolo

Essay

What I did on m

Send Reset

basic_form.html

```
<html>
  <head>
    <title>Example Form</title>
  </head>
<body>

<form method="post" action="page3-1.php"
<h2>Fill in the Form</h2>

<p><b>Name</b>
<br><input type="text" name="user_name"
</p>

<p><b>Password</b>
<br><input type="password" name="password" size="10"></p>

<p><b>Species:</b>
<br><input type="radio" name="species" value="human">   Human
<br><input type="radio" name="species" value="canine">  Canine
<br><input type="radio" name="species" value="penguin"> Penguin</p>

<p><b>Organs for Sale</b>
<br><input type="checkbox" name="for_sale[]" value="brain"> Brain
<br><input type="checkbox" name="for_sale[]" value="liver"> Liver
<br><input type="checkbox" name="for_sale[]" value="lungs"> Lungs</p>

<p><b>Hobbies</b>
<br><select name="hobbies">
  <option value="tree-house astrology">Tree-House Astrology</option>
  <option value="backyard surgery">Backyard Surgery</option>
  <option value="rodent cloning">Rodent Cloning</option>
</select>

<p><b>Essay</b>
<br><textarea name="meaning_life" rows="6" cols="40" wrap="physical">
What I did on my summer vacation...
</textarea></p>

<input type="hidden" name="my_email" value="email@niu.edu">
<p><input type="submit" value="Send"> <input type="reset"></p>
</form>
</body>
</html>
```

type=password looks like the text entry field but characters entered in this input box are not visible on the monitor. They are, however, communicated to the server.

Firefox

NIU Novell WebAccess (Da

Fill in the F

Name

Password

Species:
- Human
- Canine
- Penguin

Organs for Sale
- Brain
- Liver
- Lungs

Hobbies

Tree-House Astrolo

Essay

What I did on m

Send Reset

basic_form.html

```
<html>
  <head>
    <title>Example Form</title>
  </head>
<body>

<form method="post" ac
<h2>Fill in the Form</

<p><b>Name</b>
<br><input type="text"
</p>

<p><b>Password</b>
<br><input type="password" name="password" size="10"></p>

<p><b>Species:</b>
<br><input type="radio" name="species" value="human">   Human
<br><input type="radio" name="species" value="canine">  Canine
<br><input type="radio" name="species" value="penguin"> Penguin</p>

<p><b>Organs for Sale</b>
<br><input type="checkbox" name="for_sale[]" value="brain"> Brain
<br><input type="checkbox" name="for_sale[]" value="liver"> Liver
<br><input type="checkbox" name="for_sale[]" value="lungs"> Lungs</p>

<p><b>Hobbies</b>
<br><select name="hobbies">
  <option value="tree-house astrology">Tree-House Astrology</option>
  <option value="backyard surgery">Backyard Surgery</option>
  <option value="rodent cloning">Rodent Cloning</option>
</select>

<p><b>Essay</b>
<br><textarea name="meaning_life" rows="6" cols="40" wrap="physical">
What I did on my summer vacation...
</textarea></p>

<input type="hidden" name="my_email" value="email@niu.edu">
<p><input type="submit" value="Send"> <input type="reset"></p>
</form>
</body>
</html>
```

type=radio displays information in a radio-button format. In this case, the user may select one of three options. This input type also includes a value attribute. In most case, the value of the value attribute is the same as the text that follows the input tag.

Firefox

NIU Novell WebAccess (Da

Fill in the F

Name

Password

Species:
- Human
- Canine
- Penguin

Organs for Sale
- Brain
- Liver
- Lungs

Hobbies

Tree-House Astrolo

Essay

What I did on m

Send Reset

basic_form.html

```
<html>
  <head>
    <title>Example Form</title>
  </head>
<bod
<for
<h2>
<p>
<br>
</p>
<p>
<br>
<p>
<br>
<br><input type="radio" name="species" value="canine">  Canine
<br><input type="radio" name="species" value="penguin"> Penguin</p>

<p><b>Organs for Sale</b>
<br><input type="checkbox" name="for_sale[]" value="brain"> Brain
<br><input type="checkbox" name="for_sale[]" value="liver"> Liver
<br><input type="checkbox" name="for_sale[]" value="lungs"> Lungs</p>

<p><b>Hobbies</b>
<br><select name="hobbies">
  <option value="tree-house astrology">Tree-House Astrology</option>
  <option value="backyard surgery">Backyard Surgery</option>
  <option value="rodent cloning">Rodent Cloning</option>
</select>

<p><b>Essay</b>
<br><textarea name="meaning_life" rows="6" cols="40" wrap="physical">
What I did on my summer vacation...
</textarea></p>

<input type="hidden" name="my_email" value="email@niu.edu">
<p><input type="submit" value="Send"> <input type="reset"></p>
</form>
</body>
</html>
```

type=checkbox displays information in a check-box format. In this case, the user may select any number of three options. Like the radio button, this input type also includes a value attribute. In most case, the value of the value attribute is the same as the text that follows the input tag. In this case, the name is followed by square brackets. This will compile the values selected on the form as *elements* of an *array* with the name for_sale.

Firefox

NIU Novell WebAccess (Da

Fill in the F

Name

Password

Species:
- Human
- Canine
- Penguin

Organs for Sale
- Brain
- Liver
- Lungs

Hobbies

Tree-House Astrolo

Essay

What I did on m

Send Reset

basic_form.html

```
<html>
  <head>
    <title>Example Form</title>
  </head>
<body>

<form method="post" action="page3-1.php">
<h2>Fill in the Form</h2>

<p><b
<br><
</p>

<p><b
<br><

<p><b
<br><
<br><
<br><

<p><b
<br><
<br><input type="checkbox" name="for_sale[]" value="liver"> Liver
<br><input type="checkbox" name="for_sale[]" value="lungs"> Lungs</p>

<p><b>Hobbies</b>
<br><select name="hobbies">
  <option value="tree-house astrology">Tree-House Astrology</option>
  <option value="backyard surgery">Backyard Surgery</option>
  <option value="rodent cloning">Rodent Cloning</option>
</select>

<p><b>Essay</b>
<br><textarea name="meaning_life" rows="6" cols="40" wrap="physical">
What I did on my summer vacation...
</textarea></p>

<input type="hidden" name="my_email" value="email@niu.edu">
<p><input type="submit" value="Send"> <input type="reset"></p>
</form>
</body>
</html>
```

The **select** container provides a pull-down menu of options. It takes a **name** attribute. Between the opening and closing **select** tags, you situate any number of **option** tags. The **option** tags take a **value** attribute, which is usually set to something similar to the text that follows. The value of the **value** attribute is what is sent to the sever. The text that follows the **option** tag is the name that is seen by the user in the pull-down menu.

Firefox

NIU Novell WebAccess (Da

Fill in the F

Name

Password

Send Reset

basic_form.html

```
<html>
  <head>
    <title>Example Form</title>
  </head>
<body>

<form method="post" action="page3-1.php">
<h2>Fill in the Form</h2>

<p><b>Name</b>
<br><input type="text" name="user_name" size="40">
</p>
```

The textarea container provides for a text entry field that is larger than the single line that is produced by the type=text input field. Like all form entry options, it takes a name attribute. It also requires rows and cols attributes, which specify the size of the text area in rows of text and columns of characters. Finally, it controls word wrap with the wrap attribute. This attribute takes one of three values:

off	Word wrap is disabled
virtual	Lines appear to be wrapped, but line wrapping is not sent to the server
physical	Word wrapping is enabled

```
</select>

<p><b>Essay</b>
<br><textarea name="meaning_life" rows="6" cols="40" wrap="physical">
What I did on my summer vacation...
</textarea></p>

<input type="hidden" name="my_email" value="email@niu.edu">
<p><input type="submit" value="Send"> <input type="reset"></p>
</form>
</body>
</html>
```

Firefox

NIU Novell WebAccess (Da

Fill in the F

Name

Password

Species:

- Human
- Canine
- Penguin

Organs for Sale

- Brain
- Liver
- Lungs

Hobbies

Tree-House Astrolo

Essay

What I did on m

Send Reset

basic_form.html

```
<html>
  <head>
     <title>Example Form</title>
  </head>
<body>

<form method="post" action="page3-1.php">
<h2>Fill in the Form</h2>

<p><b>Name</b>
<br><input type="text" name="user_name" size="40">
</p>

<p><b>Password</b>
<br><input type="password" name="password" size="10"></p>

<p><b>Species:</b>
<br><input type="radio" name="species" value="human">   Human
<br><input type="radio" name="species" value="canine">  Canine
<br><input type="radio" name="species" value="penguin"> Penguin</p>

<p><b>Organs for Sale</b>
<br><input type="checkbox" name="for_sale[]" value="brain"> Brain
<br><input type="checkbox" name="for_sale[]" value="liver"> Liver
<br><input type="checkbox" name="for_sale[]" value="lungs"> Lungs</p>

<p><b>Hobbies</b>
<br><select name="hob
   <option value="tree
   <option value="back
   <option value="rode
</select>

<p><b>Essay</b>
<br><textarea name="
What I did on my summer vacation...
</textarea></p>

<input type="hidden" name="my_email" value="email@niu.edu">
<p><input type="submit" value="Send"> <input type="reset"></p>
</form>
</body>
</html>
```

The hidden input type allows for the inclusion of data that is not seen or able to be manipulate by the user. It is most often used to set the email address to which the form is to be sent. It takes both name and value attributes.

Firefox

NIU Novell WebAccess (Da

Fill in the F

Name

Password

Species:

- Human
- Canine
- Penguin

Organs for Sale

- Brain
- Liver
- Lungs

Hobbies

Tree-House Astrolo

Essay

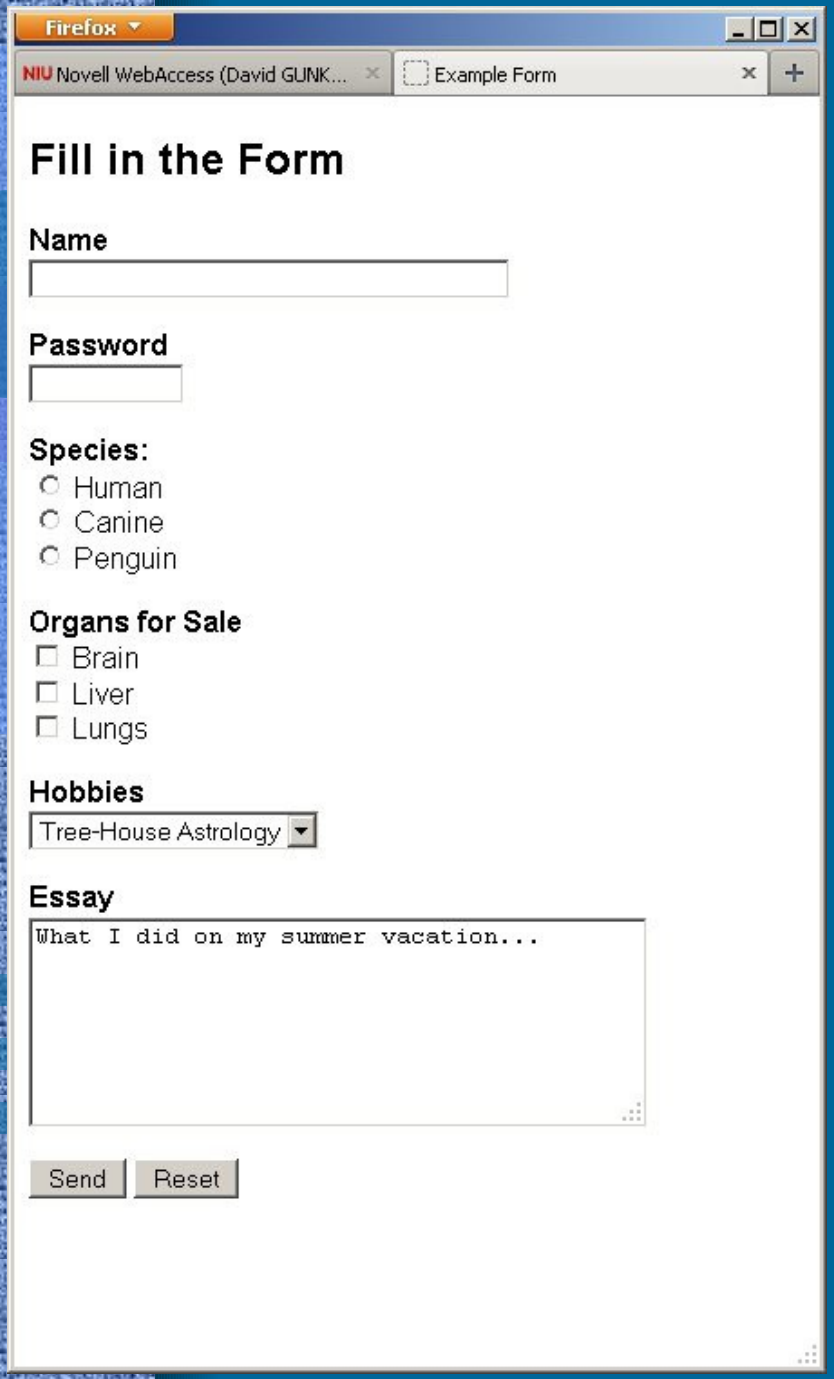
What I did on m

Send Reset

basic_form.html

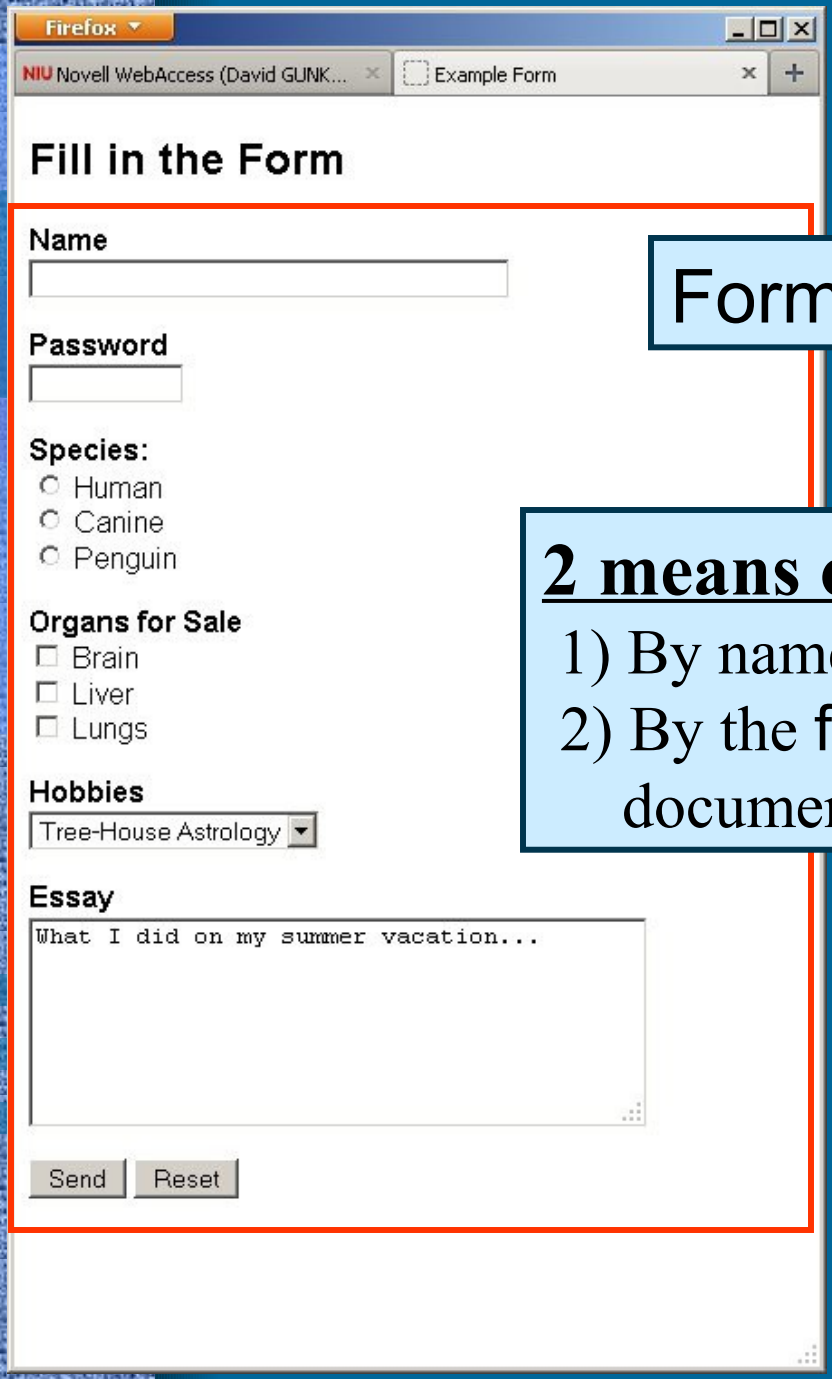
```
<html>
  <head>
    <title>Example Form</title>
  </head>
<body>

<form method="post" action="page3-1.php">
<h2>Fill in the Form</h2>

<p><b>Name</b>
<br><input type="text" name="user_name" size="40">
</p>

<p><b>Password</b>
<br><input type="password" name="password" size="10"></p>

<p><b>Species:</b>
<br><input type="radio" name="species" value="human">   Human
<br><input type="radio" name="species" value="canine">  Canine
<br><input type="radio" name="species" value="penguin"> Penguin</p>

<p><b>Organs for Sale</b>
<br><input type="checkbox" name="for_sale[]" value="brain"> Brain
<br><input type="checkbox" name="for_sale[]" value="liver"> Liver
<br><input type="checkbox" name="for_sale[]" value="lungs"> Lungs</p>

<p><b>Hobbies</b>
<br><select name="hobbies">
  <option value="tree
  <option value="back
  <option value="rode
</select>

<p><b>Essay</b>
<br><textarea name="
What I did on my summ
</textarea></p>

<input type="hidden" name="my_email" value="email@niu.edu">
<p><input type="submit" value="Send"> <input type="reset"></p>
</form>
</body>
</html>
```

The submit and reset input types create the *local action buttons*. The name of these buttons will be "submit" and "reset," unless you code a value attribute that provides an alternative.



Form

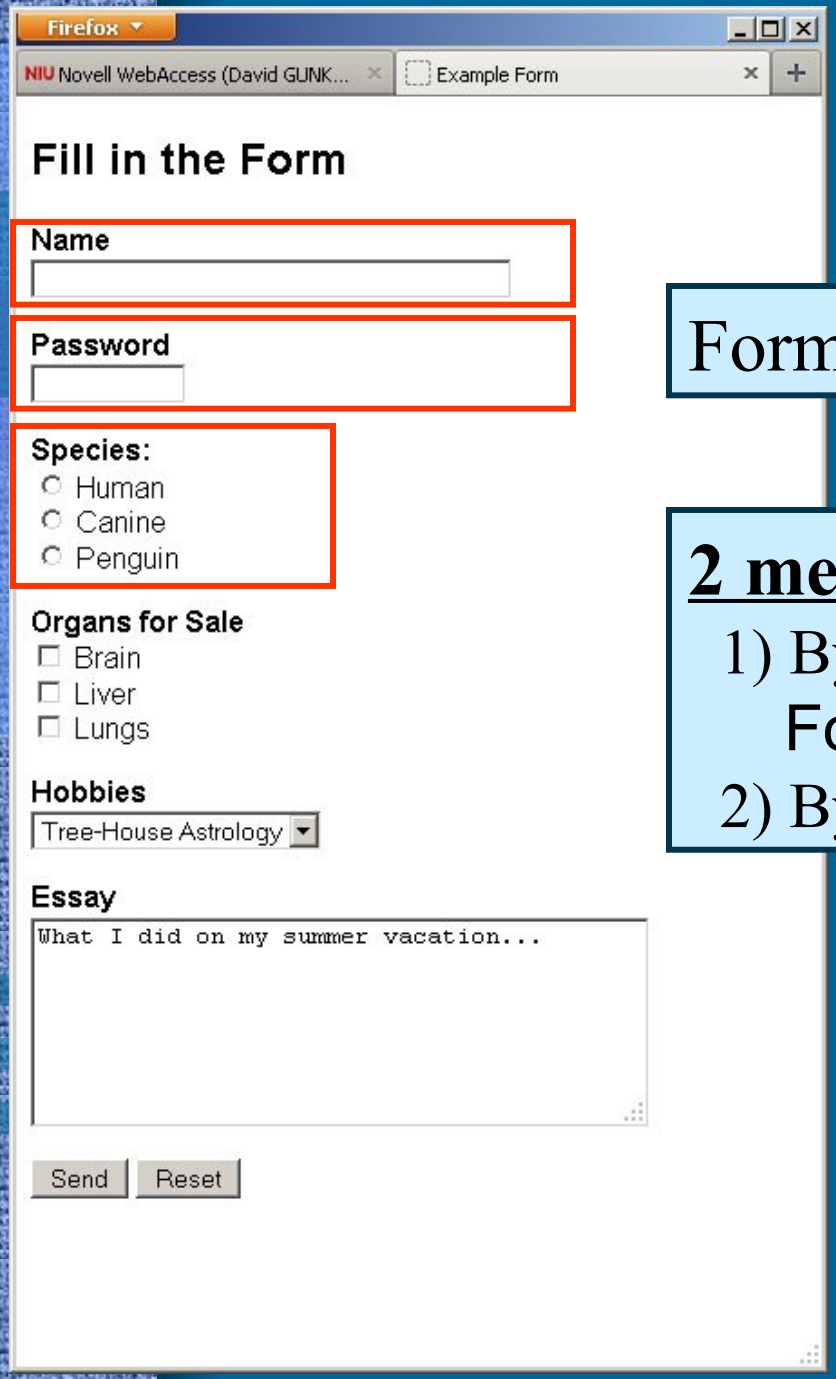
Objects
Properties
Methods( )



Form object

2 means of access

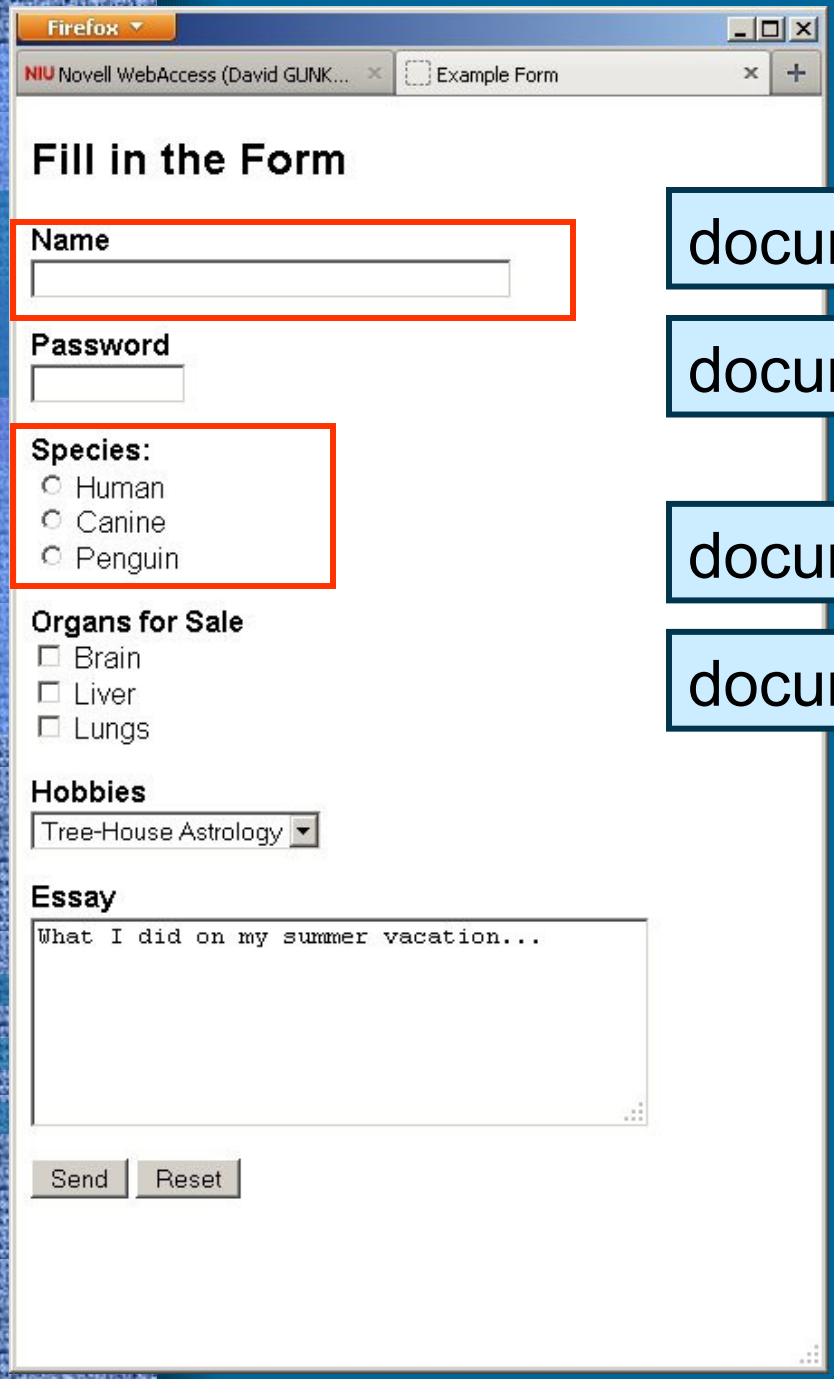
1) By name - document.myForm
2) By the forms[ ] property of the document object - document.forms[0]



Form Elements

2 means of access

1) By elements[ ] property of the Form object
2) By the name of the form object

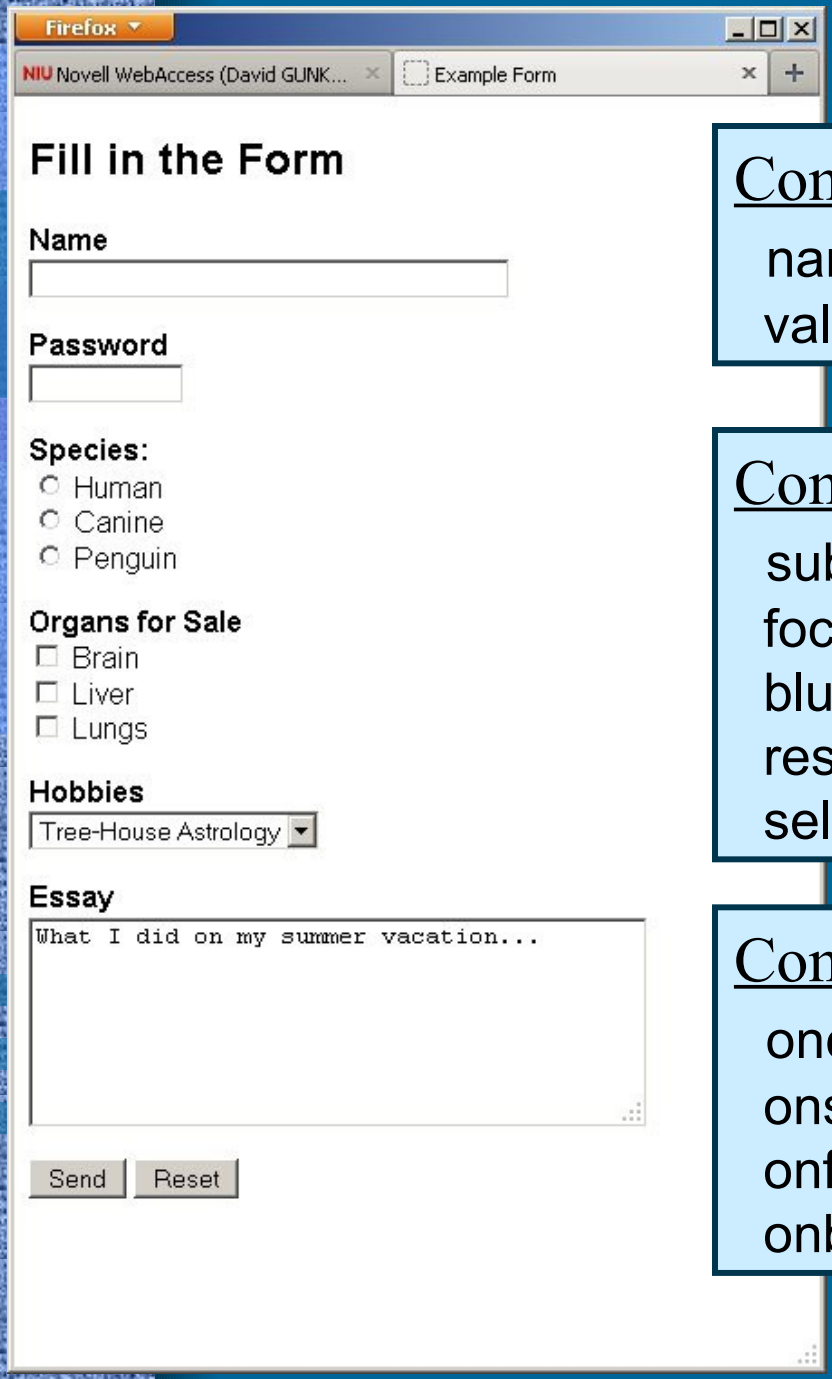


document.form[0].element[0]

document.myForm.userName

document.form[0].element[2]

document.myForm.species



Common Properties

- name
- value

Common Methods

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

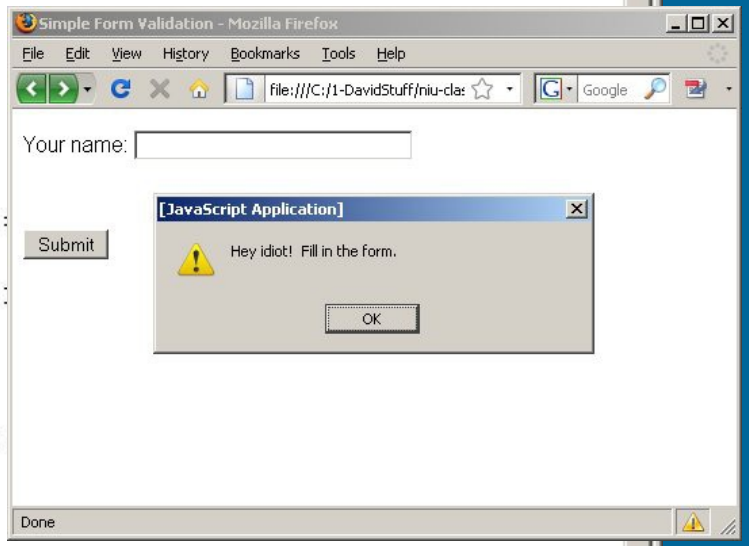
Common Event Handlers

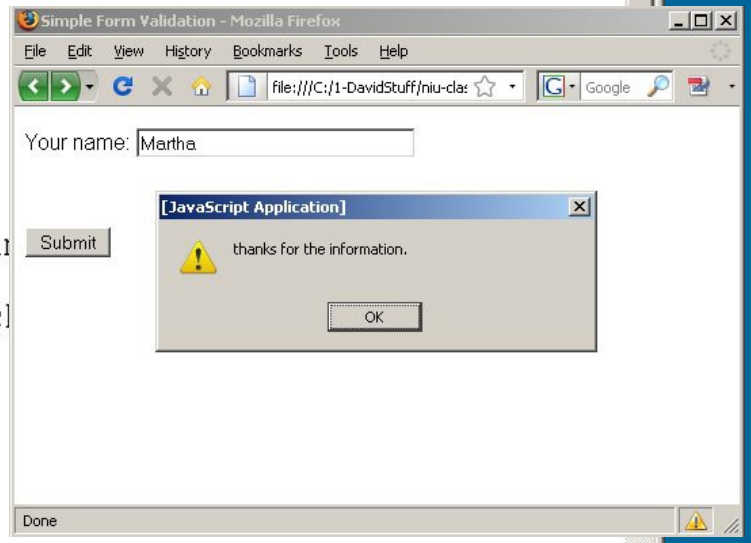
- onclick
- onsubmit
- onfocus
- onblur

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 fo
            }
          else
            {
              alert("thanks for the information
            }
        }
  </script>

</head>

<body bgcolor="#ffffff">

 <form>

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

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

 </form>

</body>
</html>
```





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:

  <p><input type

 </form>

</body>
</html>
```

Define a function called formValidation( ). If the value of the userName element of the forms array property of the document object is empty, then use an alert( ) to warn the user. Otherwise use a different alert( ) message.

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("thank
            }
        }
  </script>

</head>

<body bgcolor="#ffffff">

 <form>

  <p>Your name: <input type="text" size="30" name="userName"></p><br>

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


 </form>

</body>
</html>
```

Create an HTML form. Name the first input option **userName**. Include a button and use the **onClick** event handler to call the validation function.

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" name="userName"></p><br>

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


 </form>

</body>
</html>
```

validation1.html

This approach will work for all form elements that return a string value: <textarea> and <select>

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;
             {
               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].val
         }
       }
  </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

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; l
             {
               if (document.form
                {
                  beerChoice = l
                  break;
                }
             }
           if (beerChoice == -1)
             {
               alert("You must s
             }
           alert("Your name is "
                 ". Your beer is
         }
       }
  </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>
```

HTML form with three input options.

1) type=text, named userName.
2) Four type=radio, named beer.
3) type=button, set the value of the onClick event handler to the name of the form validation function.

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; loopCounter++)
             {
               if (document.forms[0].beer[loopCounter].checked == true)
                {
                  beerChoice = loopCounter;
                  break;
                }
             }
           if (beerChoice == -1)
             {
               alert("You must sel
             }
           alert("Your name is " +
                 ". Your beer is "
         }
       }
  </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>
```

Define the form validation function. The first if statement is the same as the previous example and tests whether the value of the userName element is empty. If it is, use an alert to warn the user.

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; loopCounter++)
             {
               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

 <form>

 <h1>Beverage
 <hr>
  <p>Your nar

  <p>Your bee
    <br><inpu
    <br><inpu
    <br><inpu
    <br><inpu

  <p><input t

 </form>

</body>
</html>
```

Check the radio buttons with an else statement. Because the radio button element does not return a string value, it cannot be checked using the method employed for a type=text input. The value returned by a radio button is held in an array, which takes the name provided in the HTML form. We check radio buttons by using a loop to see which one is clicked/checked.

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; loopCounter++)
             {
               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 +

         }
       }
  </script>

</head>

<body bgcolo

 <form>

 <h1>Beverage
 <hr>
  <p>Your na

  <p>Your bee
    <br><inpu
    <br><inpu
    <br><inpu
    <br><inpu

  <p><input t

 </form>

</body>
</html>
```

Begin by assigning the beerChoice variable the value -1. Then create a loop. Set the loopCounter to 0, and as long as the loopCounter remains less than the number of radio button elements in the form, increment the counter by one. For each step in the loop, check whether the radio button is clicked by using the checked property of the form object. beer[loopcounter] designates the different array elements (radio buttons) returned by the form. If the radio button is clicked, then set the value of the beerChoice variable to the loopCounter and end the loop.

validation2 - Notepad

File Edit Format View Help

After all this, if the beerChoice variable still has the value of -1, then none of the radio buttons are clicked. In this case, use an alert to warn the user.

If all form elements check out (data has been entered), then use an alert to inform the user of the results. In the case of the userName, the value is available as a string. In the case of the radio buttons, the value is not available as a string an needs to be accessed by specifying the proper beer array element by using the value of the beerChoice variable.

```
<html>
<head>
 <titl

  <scr

    fu

                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>
```

validation2 - Notepad

File Edit Format View Help

validation2.html

```
<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; loopCounter++)
             {
               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>
```

```
</html>
```

validation2 - Notepad

File Edit Format View Help

```
<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>
```

validation2.html

Same approach can be used to validate checkboxes

validation2 - Notepad

File Edit Format View Help

```
  <p><input type="button" value="Submit" onClick="formValidation
 </form>
</body>
</html>
```

String Manipulation

- String Methods
- Regular Expressions
- Form Validation revisited

String Manipulation

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

String Manipulation

- split( )
  - Purpose:
    - divides a single string into an array of substrings
    - Divides along the character(s) specified as the method's parameter
  - Example

```
var myString = "A,B,C";
var myTextArrary = myString.split(,);
```

Result: A B C

String Manipulation

- replace( )
  - Purpose
    - Searches a string for occurrences of a substring and replaces the substring with another substring
  - Example

```
var myString = “The rain in Spain stays mainly in the plain”;
var myNewString = myString.replace(“plain”,“yard”);
```

Result: The rain in Spain stays mainly in the yard

String Manipulation

- search( )
  - Purpose
    - Search a string for a particular substring.
    - If the substring is found, the script returns the substring's character position (a number); If it is not found, the script returns -1
  - Example

```
var myString = "The rain in Spain stays mainly in the plain";
var myNewString = myString.search("rain");
```

Result: 4

String Manipulation

- match( )
  - Purpose
    - Similar to search( ); searches a string for a particular substring – looks for a match
    - Returns an array where each element of the array contains the text of each match that was found
  - Example

```
var myString = “go dog go.  it’s not too far”;
var myArray = myString.match(“go”);
```

    - *Result:* myArray(“go”,“go”)

nixon_question - 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 correct = answer.search("Nixon");

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

  </script>

</head>

<body bgcolor="#ffffff">

 <form>
  <br>
  <p>Which US president was involved in the Watergate scandal?</p>
  <p> <input type="text" size="30" name="userResponse"></p>
  <br>
  <p><input type="button" value="Submit" onClick="formValidation()"></p>


 </form>

</body>
</html>
```

Famous Political Scandals - Mozilla Firefox

File Edit View History Bookmarks Tools Help

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

Which US president was involved in the Watergate scandal?

Submit

Done

nixon_question - 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 correct = answer.search("Nixon");

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

  </script>

</head>

<body bgcolor="

 <form>
  <br>
  <p>Which US p
  <p> <input ty
  <br>
  <p><input typ


 </form>

</body>
</html>
```

Define a function called formValidation( ).

Begin by declaring two variables. Assign to the variable answer the value of the text input box on the form. Assign to the variable correct the result of applying the search( ) method to the answer where the parameter is “Nixon”.

Use a conditional statement to run a test on the results. If the outcome of the search( ) is -1, meaning that a match was not found, then use the alert( ) method to provide a message. If the outcome is anything other than -1, then use an alert( ) to provide an alternative message.

nixon_question - 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 correct = answer.search("Nixon");

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

  </script>

</head>

<body bgcolor="#ffffff">

 <form>
  <br>
  <p>Which US president was involved in the Watergate scandal?</p>
  <p> <input type="text" size="30" name="userResponse"></p>
  <br>
  <p><input type="button" value="Submit" onClick="formValidation()"></p>


 </form>

</body>
</html>
```

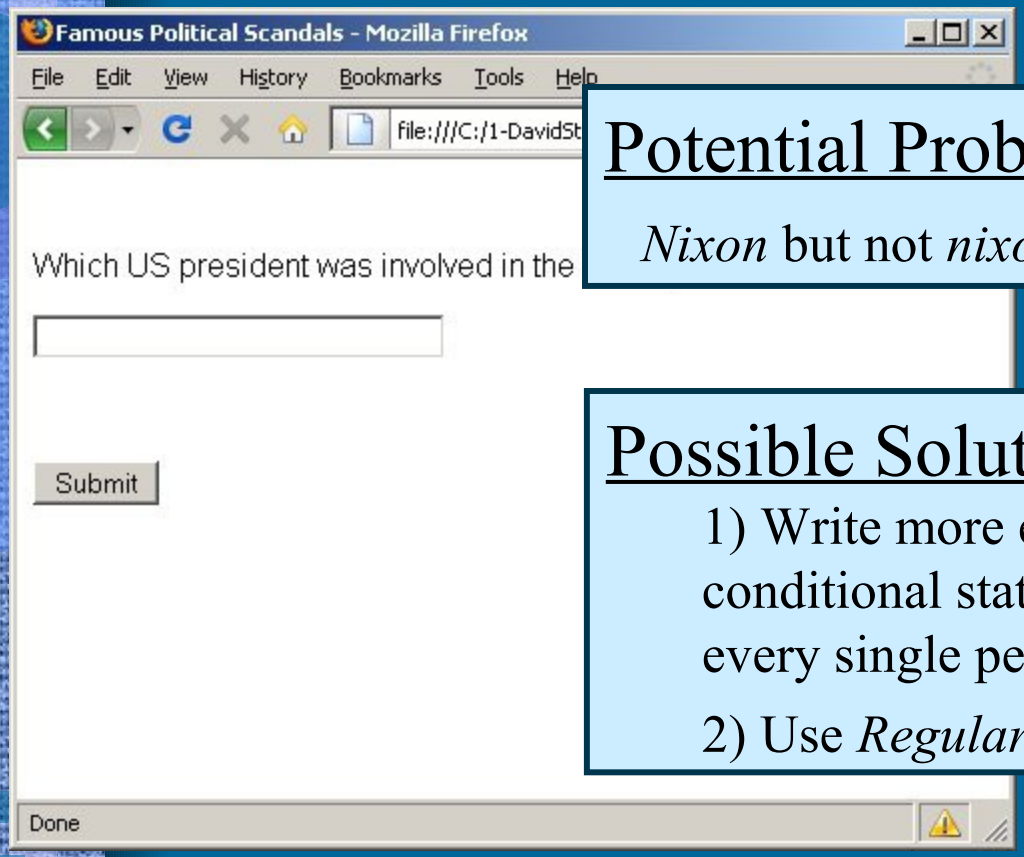
A form with one type=text input, which is named userResponse. Use an onClick event handler with the type=button input to call the function defined above.

nixon_question - 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 correct = answer.search("Nixon");

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

  </script>

</head>

<body bgcolor="#ffffff">

 <form>
  <br>
  <p>Which US president was involved in the Watergate scandal?</p>
  <p> <input type="text" size="30" name="userResponse"></p>
  <br>
  <p><input type="button" value="Submit" onClick="formValidation()"></p>


 </form>

</body>
</html>
```

nixon_question.html



Potential Problems

Nixon but not *nixon*

Possible Solutions

1) Write more elaborate conditional statements to test for every single permutation

2) Use *Regular Expressions*

Regular Expressions

- Introduction
  - Regular expressions are a means of defining a pattern of characters. This pattern can be used to split, search, match, or replace characters in a string
  - JavaScript's regular expression syntax borrows heavily from Perl and is related to that used by VBScript and other scripting languages.

Regular Expressions

- Writing Regular Expressions
  - RegExp – JavaScript native object for defining regular expressions
  - Two method of constructing a regular expression in JavaScript

```
var myRegExp = / …. /;
```

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

Regular Expressions

- Working with Regular Expressions
  - String methods

    split( ) replace( )

    search( ) match( )
  - Methods of the RegExp object
    - compile( ) – compiles a regular expression
    - exec( ) – searches a string for a pattern and returns all the matches stored in an array
    - test( ) – compares a string to a pattern and returns true or false based on the results

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 = /Nixon/;
        var correct = answer.search(myRegExp);

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

  </script>

</head>

<body bgcolor="#ffffff">

 <form>
  <br>
  <p>Which US president was involved in the Watergate scandal?</p>
  <p> <input type="text" size="30" name="userResponse"></p>
  <br>
  <p><input type="button" value="Submit" onClick="formValidation()"></p>


 </form>

</body>
</html>
```

The nixon_question example with a regular expression. Add the variable myRegExp and assign it the regular expression value /Nixon/ Change the parameter of the search( ) method to the variable myRegExp

Regular Expressions

Attribute Character	Description
g	Global match. Looks for all matches of the pattern rather than stopping after the first match is found
i	Pattern is case insensitive. Match all instances irrespective of the case of the characters.
m	Multi-line flag. Specifies that the special characters ^ and $ can match the beginning and end of the lines as well as the beginning and end of the string.

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 = /Nixon/i;
        var correct = answer.search(myRegExp);

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

  </script>

</head>

<body bgcolor="#ffffff">

 <form>
  <br>
  <p>Which US president was involved in the Watergate scandal?</p>
  <p> <input type="text" size="30" name="userResponse"></p>
  <br>
  <p><input type="button" value="Submit" onClick="formValidation()"></p>


 </form>

</body>
</html>
```

Add the attribute character **i** to the definition of the regular expression to designate that the pattern should be *case insensitive*. Now both *Nixon* and *nixon* will be matched by the search( ) method.

Regular Expressions

- Regular Expression Special Characters
  - Define more complex patterns
  - Three types
    - Text, Numbers & Punctuation Characters
    - Repetition Characters
    - Position Characters

Text, Numbers and Punctuation

Character Class	Character It Matches	Example
\d	Any digit from 0 to 9	\d\d matches 72 but not aa or 7a
\D	Any character that is not a digit	\D\D\D matches abc but not 123
\w	Any word character; that is A-Z, a-z, 0-9	\w\w\w\w matches Stan and Z9a3 but not &%#@
\W	Any non-word character	\W matches @ but not 3
\s	Any whitespace character including tab, newline, return, and formfeed	\s matches *tab*
\S	Any non-whitespace character	\S matches A but not *space*
.	Any single character other than the newline character \n	. matches a or 4 or @
[...]	Any one of the characters between the brackets	[a-z] matches any character in the range a to z.
[^...]	Any one character, but not one of those inside the brackets	[^a-z] matches any character that is not in the range a-z

Repetition Characters

Special Character	Meaning	Example
{n}	Match *n* of the previous item	x{2} matches xx
{n, }	Matches *n* or more of the previous item	x{2, } matches xx, xxx, xxxx, etc.
{n,m}	Matches at least *n* and at most *m* of the previous item	x{2,4} matches xx, xxx, xxxx But not x or xxxxx
?	Matches the previous item zero or one time	x? matches nothing or x
+	Matches the previous item one or more times	x+ matches x, xx, xxx, xxxx, etc.
*	Matches the previous item zero or more times	x* matches nothing or x, xx, xxx, xxxx, etc.

Position Characters

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.

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);

  </sc

</head

<body

 <form
  <br>
  <p>Wh
  <p>
  <br>
  <p><

 </form>

</body>
</html>
```

Element	Purpose
(Richard | R\.?)?	The string might contain the name Richard or the initial R. Or it might not. Because the period is a special character it needs to be escaped with the backslash. The final question mark indicates that Richard or R. might be in the answer or might not.
(Milhous | M\.?)?	The string might contain the name Milhous or the initial M. Or it might not.
Nixon	The string must contain the name Nixon
i	The expression is case insensitive. Consequently any form of Nixon, nixon, Richard Nixon, or r. m. nixon will match.

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 right!");
         }
      }

  </script>

</head>

<body bgcolor="#ffffff">

 <form>
  <br>
  <p>Which US president was involved in the Watergate scandal?</p>
  <p> <input type="text" size="30" name="userResponse"></p>
  <br>
  <p><input type="button" value="Submit" onClick="formValidation()"></p>


 </form>

</body>
</html>
```

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

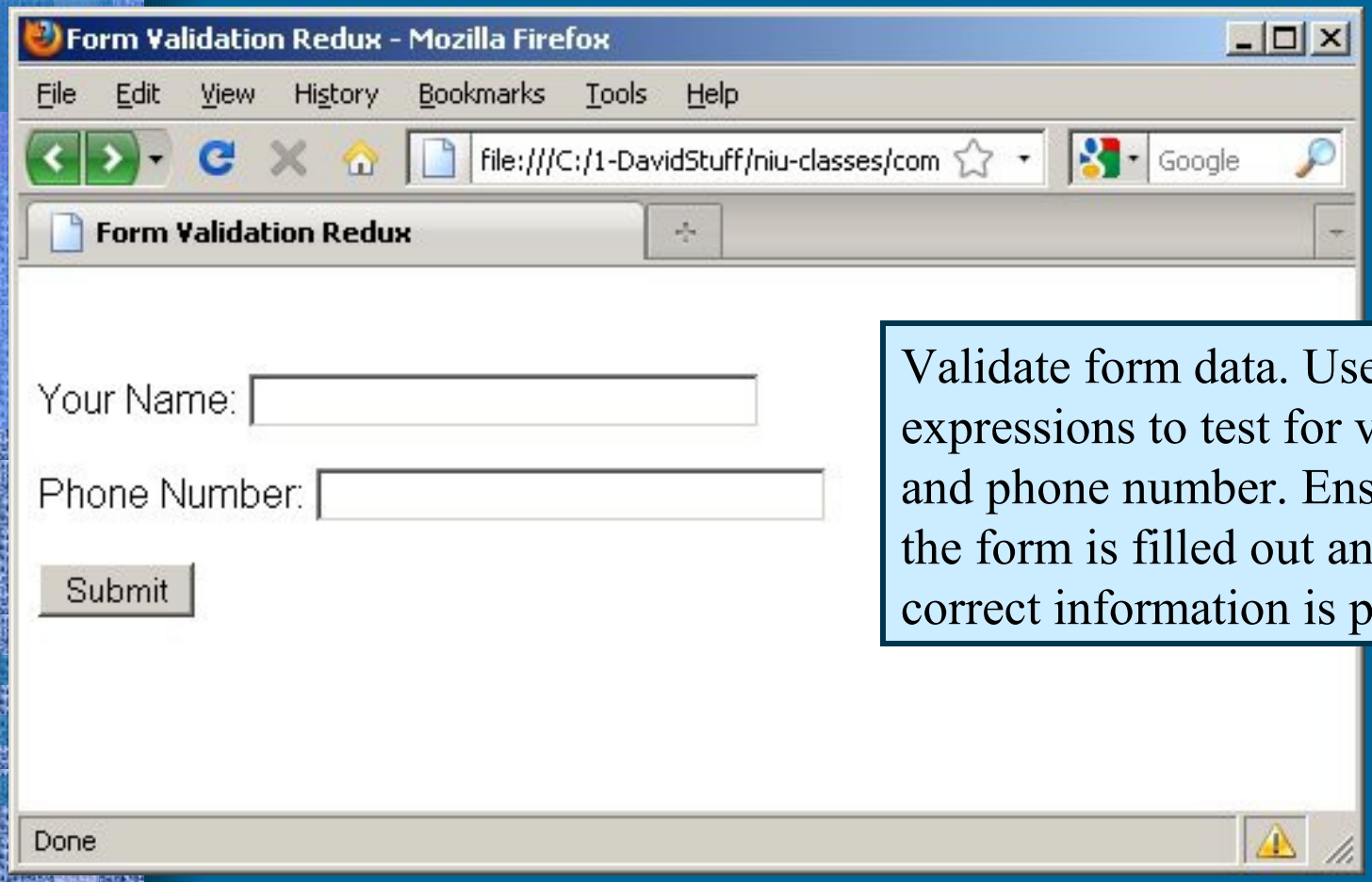
- Regex Forums
- Regex Blogs
- Regex Mailing List

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.

http://RegExLib.com

Form Validation



Validate form data. Use regular expressions to test for valid name and phone number. Ensure that the form is filled out and that the correct information is provided.

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 valid name.");
            return false;
          }
        if (!correctPhone)
          {
            alert("Error--Please enter a valid phone number.");
            return false;
          }
        else
          {
            alert("All information is correct.  Thank you.");
          }
       }
  </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>
```

Define a function called formValidation( ), which performs two regular expression matches.
The first checks for a valid name, the second checks for a valid phone number.

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 phoneRe
        var correct

        if (correct
          {
            alert("
            return
          }
        if (!correc
          {
            alert("
            return
          }
        else
          {
            alert("
          }
      }
  </script>
</head>
<body bgcolor="#fff
   <form>
     <p>Your Name:
     <p>Phone Numbe
     <p><input type="button" value="Submit" onClick="formValidation()"></p>
   </form>
</body>
</html>
```

Declare a variable answerName and assign to it the value of the information entered into the userName field on the form.

Declare another variable called nameRegExp and assign to it a regular expression. This expression begins and ends with a slash. Between the two slashes are some regular expression characters: [^ \d] This says that there can be no empty space or any digit between 0 and 9.

Use the search method to check for the occurrence of any of the regular expression characters in the answerName. If a match is found, the script will return a positive number. If not, the script will return -1. This value is then assigned to the correctName variable.

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
            return false;
          }
        if (!correctPhone)
          {
            alert("Error--Please
            return false;
          }
        else
          {
            alert("All informati
          }
       }
  </script>
</head>
<body bgcolor="#ffffff">
   <form>
     <p>Your Name: <input type="
     <p>Phone Number: <input typ
     <p><input type="button" val
   </form>
</body>
</html>
```

Do something similar for userPhone.

Obtain the regular expression from RegExLib.com Cut and paste the regular expression and add a slash character at the beginning and end of the expression.

Instead of using the search( ) method (which is a method of the String object), we now use the exec( ) method of the RegExp object. Unlike search( ), which returns a number indicating the position of the matched characters, exec returns the actual matched values.

validation_redux3.html

```
<html>
<head>
 <title>Form Validation Redux</title>
  <script type="text/javascript">
    function form
      {
        var answe
        var nameR
        var corre

        var answe
        var phone
        var correctPhone  = phoneRegExp.exec(answerPhone)

        if (correctName == -1)
          {
            alert("Error--Please enter a valid name.");
            return false;
          }
        if (!correctPhone)
          {
            alert("Error--Please enter a valid phone number.");
            return false;
          }
        else
          {
            alert("All information is correct.  Thank you.");
          }
      }
  </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>
```

Conditional statements.
If the value of the correctName variable is -1 (meaning that no match was found), then use an alert to provide the user with an error message.

validation_redux3.html

```
<html>
<head>
 <title>Form Validation Redux</title>
  <script type="text/javascript">
    function form
      {
        var answe
        var nameR
        var corre

        var answe
        var phone
        var correctPhone  = phoneRegExp.exec(answerPhone)

        if (correctName == -1)
          {
            alert("Error--Please enter a valid name.");
            return false;
          }
        if (!correctPhone)
          {
            alert("Error--Please enter a valid phone number.");
            return false;
          }
        else
          {
            alert("All information is correct.  Thank you.");
          }
      }
  </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>
```

If there is no correctPhone, then provide an alert for the phone number. If neither condition is met (meaning that the two input fields are valid), then execute the else part of the statement and provide an alert.

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 valid name.");
            return false;
          }
        if (!correctPhone)
          {
            alert("Error--Please enter
            return false;
          }
        else
          {
            alert("All information is
          }
       }
  </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>
```

In the <body> include a <form> with two type=text input fields named userName and userPhone.

Use an onClick event handler to call the function formValidation( ) when the submit button is clicked.

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 valid name.");
            return false;
          }
        if (!correctPhone)
          {
            alert("Error--Please enter a valid phone number.");
            return false;
          }
        else
          {
            alert("All information is correct.  Thank you.");
          }
       }
  </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>
```

form_validation.html

Form Processing

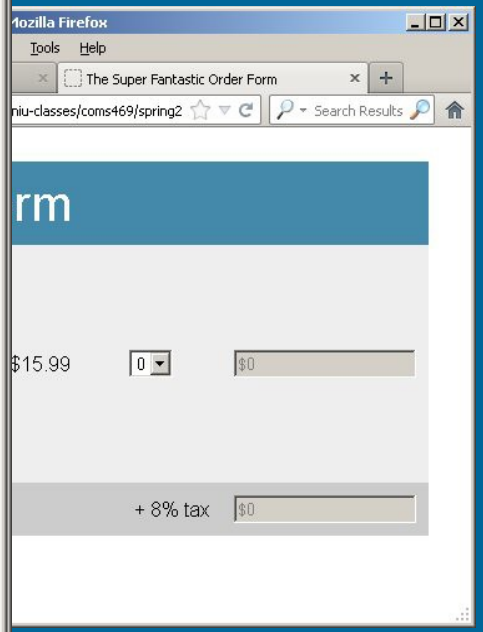
- Two kinds of form processing
  1. Server side processing
     - Complex processing that requires access to a database or other information resource
     - CGI, PHP, PERL, ASP
  2. Client side processing
     - Processing takes place on the user's machine
     - Less powerful than server side processing
     - Applications
       - Calculate totals on an order form prior to submission
       - User administered quiz or self-test

Forms

- Example
  - Basic Order Form
  - Client side processing of form data
    - Calculate subtotal
    - Calculate tax
    - Calculate grand total

jesus_form.html

```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].jesusPrice.value;
      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></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="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>
  <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 * do
      document.forms[0].inputbox1.value = "$" + jesus

      grandTotal = (jesusTotal * tax) + jesusTotal;
      document.forms[0].inputbox2.value = "$" + grand
    }
  </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></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="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>
```

Define a function called addTotal( )

Declare three variables:

- jesusPrice
- jesusTotal
- grandTotal.

Declare a fourth variable tax and assign it the value of 0.08 or 8%.

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].jesusPrice.value;
        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" wid
    <tr bgcolor="#4488aa">
        <td colspan="4" style="font-size:40px; color:#ff
    <tr bgcolor="#eeeeee">
        <td><img src="images/jesus.jpg"></td>
        <td>$15.99<input type="hidden" value="15.99" nam
        <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>
```

Calculate jesusTotal by extracting the value the user enters into the form input field that has the name jesus. Multiply this by the value of the jesusPrice, which is also returned by the form. Assign this result to the form element named inputbox1.

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].jesusPrice.value;
        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="somethin
  <table border="0" cellspacing="0"
    <tr bgcolor="#4488aa">
        <td colspan="4" style="font-
    <tr bgcolor="#eeeeee">
        <td><img src="images/jesus.j
        <td>$15.99<input type="hidde
        <td>
          <select name="jesus" onC
            <option value="0" selec
            <option value="1">1</op
            <option value="2">2</op
            <option value="3">3</op
            <option value="4">4</op
            <option value="5">5</op
          </select></td>
        <td><input type="text" name=
    <tr bgcolor="#cccccc">
        <td colspan="3" align="right">+ 8% tax</td>
        <td><input type="text" name="inputbox2" disabled></td></tr>
  </table>
</form>
</body>
</html>
```

Calculate the grandTotal by multiplying the jesusTotal and the tax (to obtain 8% of the jesusTotal) and then adding this quotient to the jesusTotal.

Display this data by adding a dollar sign to the grandTotal, applying the toFixed(2) method to the figure (in order to limit the number of figures after the decimal point), and assigning this result to the value of inputbox2 on the form.

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 * do
        document.forms[0].inputbox1.value = "$" + jesus

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

Include a form in the <body> of the document. Name the form myForm and set its action to some fictional php script.

Use a <table> to format the form. The table will have 4 table rows <tr> with 4 columns, marked by 4 <td> tags within each <tr> container.

```
<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="#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>
  <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 * do
        document.forms[0].inputbox1.value = "$" + jesus

        grandTotal = (jesusTotal * tax) + jesusTotal;
        document.forms[0].inputbox2.value = "$" + grand
      }
  </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></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="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>
```

First table row has one column <td>
It uses the colspan="4" attribute to span all 4 columns of the table and the style attribute to format and present the label "Order Form."

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].inputbox1.value = "$" +

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

<body bgcolor="#ffffff">
<form name="myForm" action="something.php">
  <table border="0" cellspacing="0" cellpadding="1
    <tr bgcolor="#4488aa">
        <td colspan="4" style="font-size:40px; color:#ffffff">Order Form</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="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>
```

Second table row uses 4 <td> tags.

First <td> Includes the image of the product.

Second <td> uses a type=hidden input field to store the value of jesusPrice. This value will be accessed and used by the function you defined above.

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].jesu
        document.forms[0].inputbox1.value =

        grandTotal = (jesusTotal * tax) + j
        document.forms[0].inputbox2.value =
      }
  </script>
</head>

<body bgcolor="#ffffff">
<form name="myForm" action="something.php">
  <table border="0" cellspacing="0" cellpad
    <tr bgcolor="#4488aa">
        <td colspan="4" style="font-size:40
    <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>
```

Third <td> uses a select input box to allow the user to specify a number. Include the onClick event handler, which will call the function, when the user activates the select input.

Fourth <td> includes a type=text input field with the attribute disabled to display the result assigned to the jesusTotal.

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].jesusPrice.value;
      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
  <table border="0" cellspacing="0" c
    <tr bgcolor="#4488aa">
        <td colspan="4" style="font-s
    <tr bgcolor="#eeeeee">
        <td><img src="images/jesus.jp
        <td>$15.99<input type="hidder
        <td>
          <select name="jesus" onCli
            <option value="0" select
            <option value="1">1</opt
            <option value="2">2</opt
            <option value="3">3</opt
            <option value="4">4</opt
            <option value="5">5</opt
          </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>
```

The fourth table row has two <td> tags.

The first <td> uses the colspan="3" and indicates the tax rate of 8%.

The second <td> includes a type=text input that is disabled. This input field (which is named inputbox2) displays the value of the grandTotal that is calculated by the function.

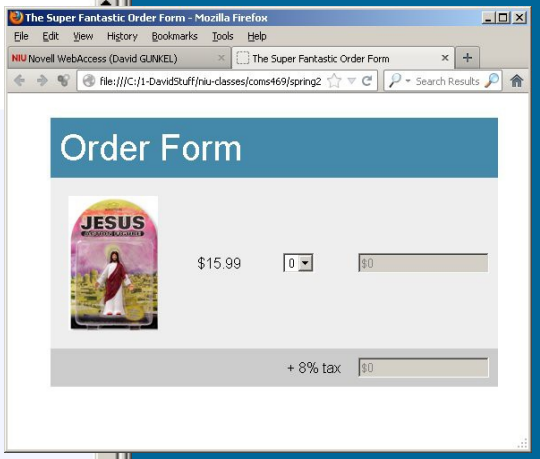
jesus_form.html

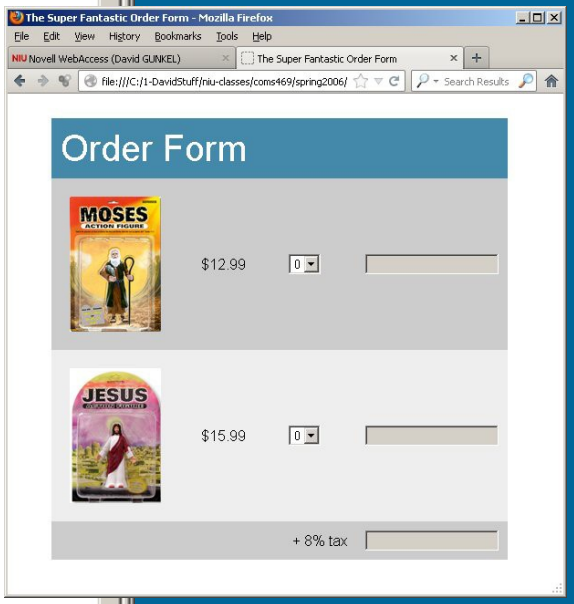
```html
<html>
<head>
  <title>The Super Fantastic Order Form</title>
  <script type="text/javascript">
    function addTotal()
    {
      var jesusPrice;
      var jesusTotal;
      var grandTotal;
      var tax = 0.08;

      jesusTotal = document.forms[0].jesus.value * document.forms[0].jesusPrice.value;
      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></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="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>
```

Image available at:
http://gunkelweb.com/coms469/exercises/forms.html

jesus_form.html

```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].jesusPrice.value;
      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></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="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>
```





Version 2.0

Similar Applications – Worksheets

The Super Fantastic Order Form - Mozilla Firefox

File Edit View Go Bookmarks Tools Help

Employee Benefits Worksheet

Information

Status: ○ Full Time ○ Part Time

Annual Salary: $

Start Date: month day year

Health Insurance Plans

Provider	Cost	Number of Dependents	Cost
Acme Health Alliance	$99.42/month	0	
Humana HMO/PPT	$125.12/month	0	
Cheap-Ass Health Plan	$25.89/month	0	

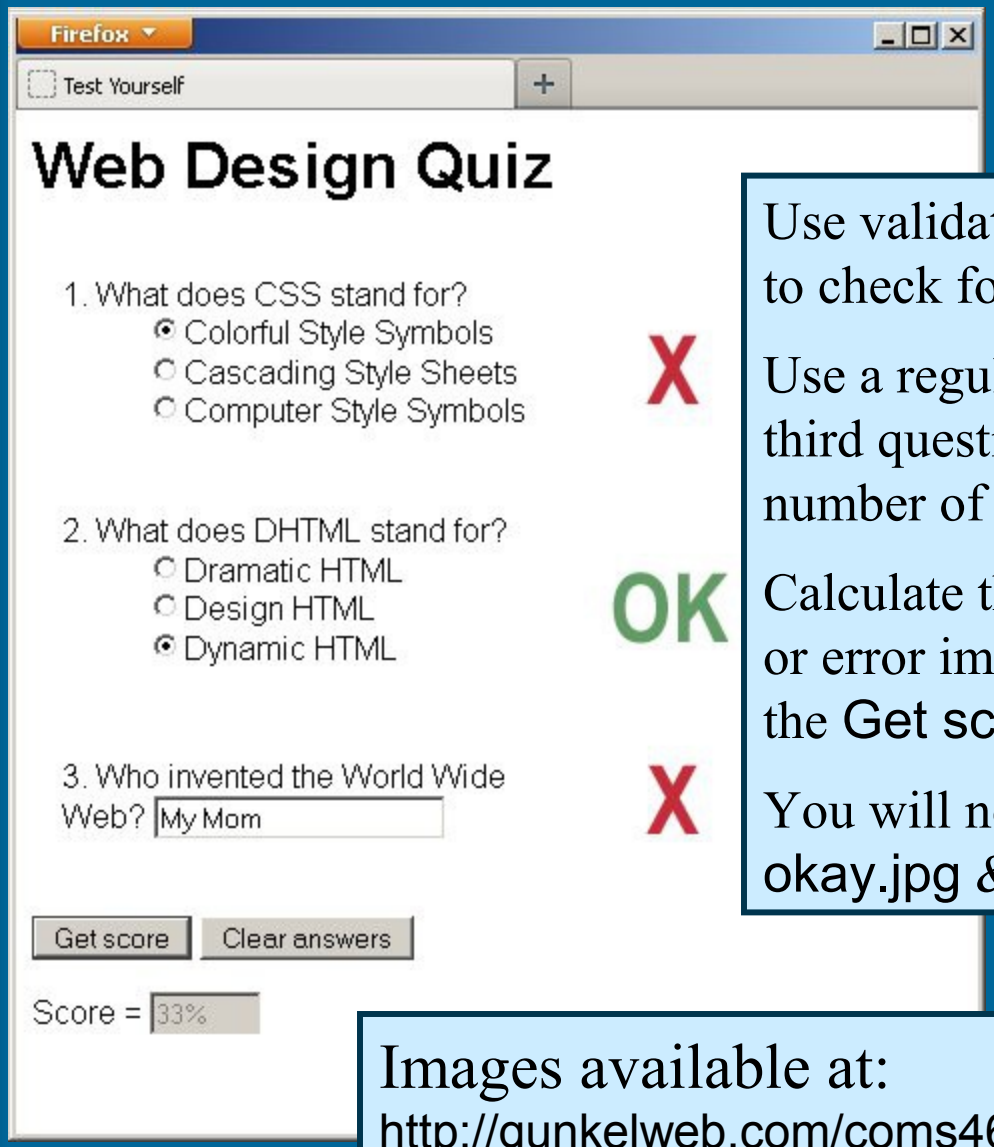
Life Insurance Plans

Provider	Coverage Options	Cost
Standard Old Life, Inc.	1x annual salary	

Total Reset Calculate

Done

Home Work Exercise



Use validation on the radio buttons to check for correct answers.

Use a regular expression with the third question to accommodate a number of possible right answers.

Calculate the score and display okay or error images, when the user clicks the Get score button.

You will need 3 images blank.jpg, okay.jpg & error.jpg

Images available at:
http://gunkelweb.com/coms469/exercises/forms.html

Preview

- Ch. 8: Windows and Frames (pp. 263-299)
- Ch. 10: Date, Time, and Timers (pp. 347-365)