

# CGS 3175: Internet Applications

## Fall 2009

### Advanced XHTML & CSS – Forms

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# Designing Interface Components - Forms

- Forms are important to many web sites because they provide a means by which user-entered data can be sent from the browser across the network to the web site's web server (e.g. eustis.eecs.ucf.edu).
- From simple log-ins and sign-ups, through to multi-page e-commerce checkouts, forms are everywhere, and understanding how to create them is a key skill the every web developer should have.
- Since forms are such an important part of many websites, we'll look at both how forms work and how they are marked up in XHTML as well as styling them with CSS.



# Designing Interface Components - Forms

- Every time you use a search engine, place an order, or join an online mailing list, you use a **form**.
- A form is an XHTML element that contains and organizes other objects – such as text boxes, check boxes, and buttons – that can accept information from Web site visitors.

This form has only three elements. One text box that accepts the keywords to be used in the search, and two buttons that can submit the form and get the search started.



# How Forms Work

- The purpose of a form is to gather various pieces of data from the user.
- When the form is submitted, usually by clicking a button on the screen, the form data, structured as a set of name/value pairs is passed to the server to be processed by a server-side script written in a language such as PHP Java, or Perl.
- Even though you might not be the person who is writing the server-side code, you need to know how to create the forms in XHTML so that they send the correctly structured data to the server for processing.



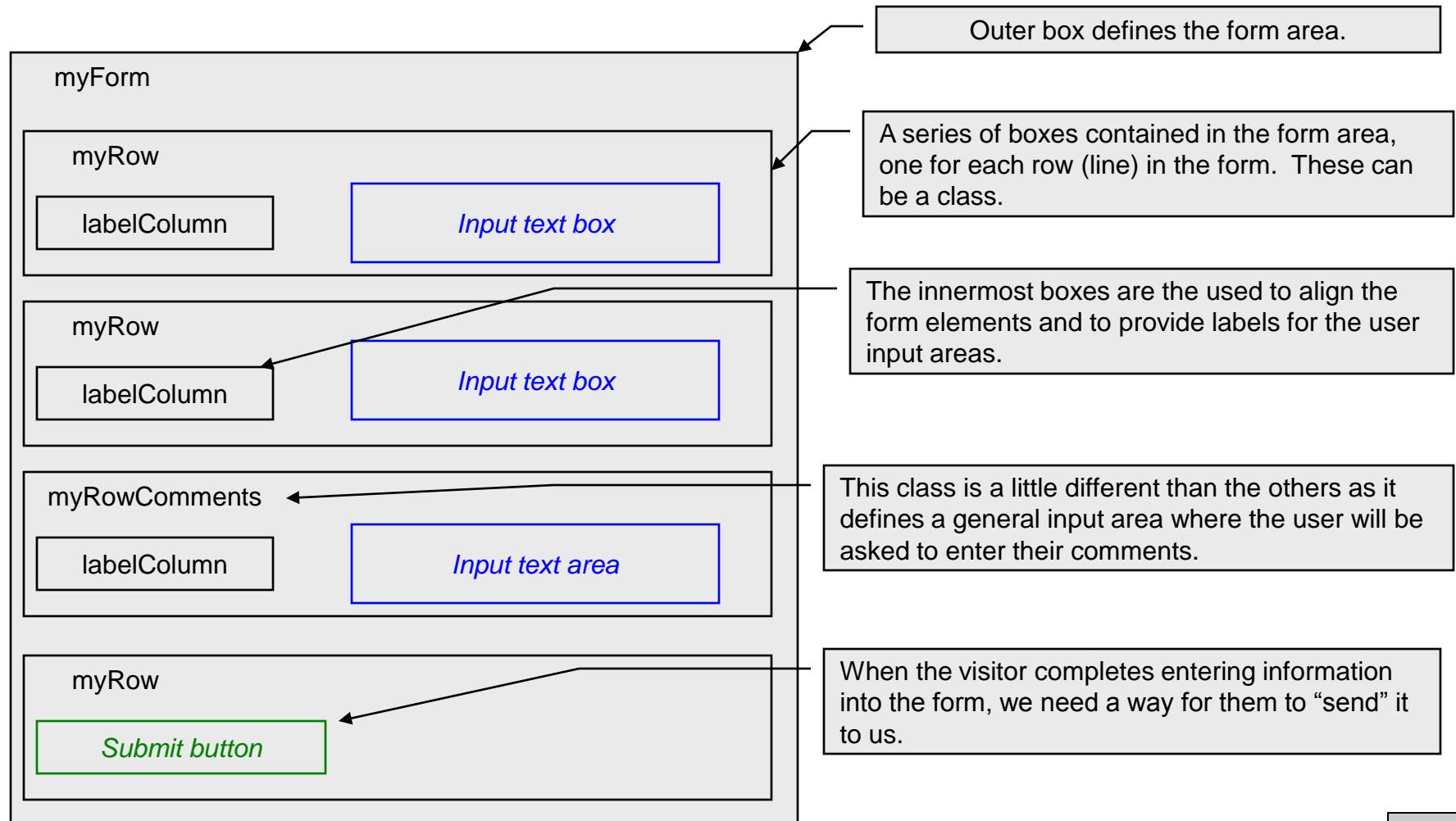
# Using CSS to Style a Form

- Tables have been traditionally used to create forms in Web pages.
- Since you are learning the new style of Web page development in this course which utilizes CSS for all page layout, we'll also learn the new way of creating forms using only CSS without tables.
- To create a form using only CSS, you take advantage of the CSS box model to create a series of boxes which are the elements (rows and columns) of your table.
- As we've done with our splash pages and content pages, the best way to design a form using CSS is to first storyboard the form layout and then create the XHTML document to include the form elements and finally create the CSS to render the form with the correct layout.



# Using CSS To Style The Form

- Shown below is the storyboard for the form we want to create.



First Form Example - No CSS - Mozilla Firefox

File Edit View History Bookmarks Tools Help

Form without CSS

file:///C:/Courses/CGS 3175 - Internet Applications/Fall 2009/example Google

Most Visited Getting Started Latest Headlines

Form with Pure CSS First Form Exam Input text box

Tell Us What You Think About CGS 3175!

Name:  Input text box

E-mail:  Input text area

Comments:

The submit button

Send Your Comments

Done

This screenshot shows a simple HTML form displayed in Mozilla Firefox. The title bar reads "First Form Example - No CSS - Mozilla Firefox". The menu bar includes File, Edit, View, History, Bookmarks, Tools, and Help. The address bar shows the local file path "file:///C:/Courses/CGS 3175 - Internet Applications/Fall 2009/example". Below the address bar are links for Most Visited, Getting Started, and Latest Headlines. A tab labeled "First Form Exam" is open. The main content area contains a heading "Tell Us What You Think About CGS 3175!". It has fields for "Name" (an input text box), "E-mail" (an input text box), and "Comments" (a large input text area). A "Send Your Comments" button is located below the comments area. A "Done" link is at the bottom. Four blue callout boxes with arrows point to specific elements: one labeled "Input text box" points to the Name field, another labeled "Input text area" points to the E-mail field, a third labeled "The submit button" points to the large Comments text area, and a fourth labeled "Form without CSS" is positioned near the top right of the window.



Form without CSS



file:///C:/Courses/CGS 3175 - Internet Applications/Fall 2009/example



Getting Started

Latest Headlines

Form with Pure CSS

First Form Example - No CSS

## Tell Us What You Think About CGS 3175!

Name:

E-mail:

Comments:

Done



C:\Courses\CGS 3175 - Internet Applications\Fall 2009\example code - new\Advanced XHTML & CSS - Forms\form 1 without css.html - No...

File Edit Search View Format Language Settings Macro Run TextFX Plugins Window ?

form 1.html form 1 without css.html

Markup Only

```
5   <head>
6     <title>First Form Example - No CSS</title>
7   </head>
8   <body>
9     <h2>Tell Us What You Think About CGS 3175!</h2>
10    <div>
11      <form method="post" action="mailto:markl@cs.ucf.edu" enctype="text/plain" >
12        <div>
13          <label for="Name"></label>
14          <span class="labelCol">Name:</span>
15          <span><input type="text" name="Name" id="Name" /></span>
16        </div>
17        <div>
18          <label for="Email"></label>
19          <span class="labelCol">E-mail:</span>
20          <span><input type="text" name="Email" id="Email" /></span>
21        </div>
22        <div>
23          <label for="Comments"></label>
24          <span class="labelCol">Comments:</span>
25          <textarea name="Comments" id="Comments" rows="10" cols="75"></textarea>
26        </div>
27        <div>
28          <input id="submitbutton" type="submit" value="Send Your Comments" />
29        </div>
30      </form>
31    </div>
```

Hyper Text Markup Lang nb char :1029 nb line :34 Ln :30 Col :8 Sel :0 Dos\Windows ANSI INS



# New XHTML Tags: <form>

- A form in XHTML is contained within a `form` element. The form itself contains regular text and other XHTML form elements such as check boxes, pull-down menus, and text fields.
- The W3C specification calls these form elements `controls`, but are most commonly referred to as “`form fields`”.
- There are a variety of form fields that can be inserted.
- In order to make a form work, you will need to specify two things in the form tag: (1) the address of the program that will handle the form contents using the `action` attribute and (2) the method by which the form data will be passed using the `method` attribute.
- The `action` attribute determines how the form is to be handled. The `action` attribute is usually set to the URL of the program that will handle the data in the form. We'll discuss this attribute in more detail later but for now we won't really “handle” the data in the form in any significant manner. In our example, we will simply email the data.



# New XHTML Tags: <form>

- The `method` attribute determines how the form will be submitted to the address specified by the `action` attribute.
- There are only two acceptable values for this attribute: `get` and `post`. These are HTTP methods that a browser uses to talk to a server. (See Introduction – Part 2, page 33.) We won't worry about the subtle differences between these two values for the moment, but in general post will be preferred whenever either large amounts of data are being sent to the server or data is to be stored in a database.
- The `enctype` attribute determines how the data in the form is to be encoded when it is sent to the server. The default for most browsers is the same MIME format that is used for URLs. Particularly when using a `mailto` URL, the encoding type `text/plain` is normally used for ease of reading.



# New XHTML Tags: <form>

- A web page can contain any number of form elements, but forms cannot be nested inside one another, unlike list elements which can.
- This is because each form's contents must be handled separately by the action attribute of that form, so nesting of forms is not possible.
- We'll see later how to group elements of a form together to enhance the visual clarity of the form, and while this may give the illusion of a nested form, rest assured that it is not nested.
- What we'll do for the rest of this section of notes is two things: (1) we'll add CSS styling to our forms and (2) look at the various form controls in XHTML to add features to the form.



# Using CSS To Style The Form

- We'll define an `id` called `myForm` to define the properties of the entire form area, thus, `myForm` is the outermost box.
- The `myRow` class will set the height for a typical line in the form.
- The `myRowComments` class will configure a form area that is a general text input area where we will receive comments from the visitors. We'll ultimately set this up so that a 20 pixel margin is set below the scrolling text box.
- The `labelCol` class is the key to aligning the text. We'll need to set the width of this element to accommodate our largest label. We'll start out with 100 pixel width and adjust from there. All of the text in the `labelCol` elements will align to the right.
- We'll create the markup first and then worry about applying the styles.



First Form Example With CSS - Mozilla Firefox

File Edit View History Bookmarks Tools Help

file:///C:/Courses/CGS 3175 - Internet Applications/Fall 2009/example Google

Most Visited Getting Started Latest Headlines

First Form Example - No CSS First Form Example With CSS

Form with CSS

## Tell Us What You Think About CGS 3175!

Name:

E-mail:

Comments:

**Send Your Comments**

Done

CGS 3175: Internet Applications (Adv. XHTML/CSS - Forms) Page 14 © Mark Llewellyn



C:\Courses\CGS 3175 - Internet Applications\Fall 2009\example code - new\Advanced XHTML & CSS - Forms\form 1.html - Notepad++

File Edit Search View Format Language Settings Macro Run TextFX Plugins Window ?

form 1.html form 1 without css.html

```
4 <html xmlns="http://www.w3.org/1999/xhtml" >
5 <head>
6   <title>First Form Example With CSS</title>
7   <style type="text/css">
8     <!--
9       body{ font-family:Arial,sans-serif;
10          background-color:#EEE; /*was DDD*/
11          color:#000000;
12        }
13        #myForm {border:3px solid black; /*was blue */
14          padding:10px;
15          margin:10px;
16          background-color: #CCC;
17          width: 750px;
18        }
19        .myRow {height:30px;
20      }
21        #myRowComments {margin-bottom:20px;
22      }
23        .labelCol{float:left; width: 100px; text-align: right; padding: 0px 8px 0px 0px;
24      }
25        #submitButton { background-color:green; color:white;
26      }
27      -->
28    </style>
29 </head>
```

CSS for the form

Hyper Text Markup Lang nb char : 1651 nb line : 56 | Ln : 28 Col : 1 Sel : 0 | Dos\Windows ANSI | INS



# Browser Rending Of The Form

First Form Example With CSS - Mozilla Firefox

File Edit View History Bookmarks Tools Help

(file:///C:/Courses/CGS 3175 - Internet Applications/Fall 2009/example)

Most Visited Getting Started Latest Headlines

First Form Example - No CSS First Form Example With CSS

**Tell Us What You Think About CGS 3175!**

Name: Mark Llewellyn

E-mail: markl@cs.ucf.edu

Comments:

```
This is a great class!
I
think
it
is
the
best
class
I've
ever
taken
```

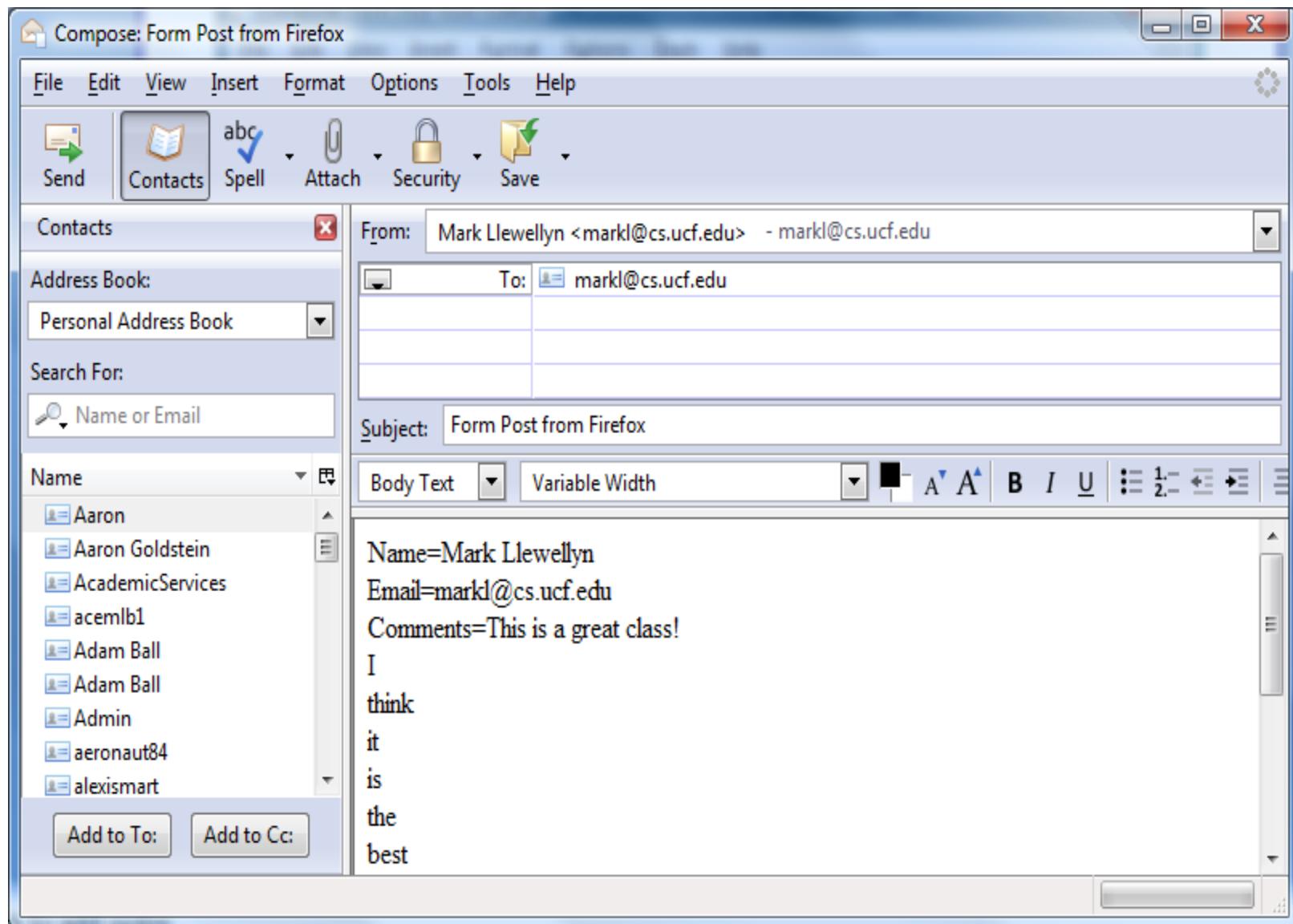
Send Your Comments

Done

Notice the up/down sliders appear when the entered text expands beyond the visible portion.



# Email program activated by clicking button



Zimbra: Inbox (916) - Windows Internet Explorer

https://rocky.eecs.ucf.edu/zimbra/#1

File Edit View Favorites Tools Help

Google Search Bookmarks Check Translate Sign In

Favorites Suggested Sites Free Hotmail Web Slice Gallery Keep Vid KeepVid- Download and s...

Zimbra: Inbox (916)

**Zimbra**

Dr. Mark Llewellyn  
1 GB of unlimited

New Folder

**Folders**

- Inbox (916)
- Sent
- Drafts
- Junk
- Trash
- 2005 mail
- 2006 mail
- 2007 mail (410)**
- 2008 mail (755)**
- advising
- Backup (2)
- CGS 3175 - Spring 2008
- cop 4710 hw#4
- cop4710 (6)

November 2009

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	<b>10</b>	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	1	2	3	4	5
6	7	8	9	10	11	12

**Search** Email Search Local Save Advanced

Search the Web... Standard version Offline version Help Log Out

Mail Address Book Calendar Tasks Documents Briefcase Preferences

New Get Mail Delete Reply Reply to All Forward Junk View 1 - 25

From Subject Folder Size Received

Mark Llewellyn Form Post from Firefox - Name=Mark Llewellyn Email=markl@cs.ucf.edu Comm... Inbox 2 KB 3:13 PM

Humane Society ... The NEW humanesociety.org. Point, click, act! - Check out our new websi... Inbox 22 KB 3:13 PM

hptisnow HP Trade-In and Save Now Shipping Instructions - HP Trade-In Program Market... Inbox 22 KB 2:59 PM

Carl Witham Summit Technical Services - Mark, Good afternoon. I wanted to send you this e... Inbox 6 KB 2:41 PM

Victoria's Secret FREE SHIPPING + \$30 Off! Ends Tomorrow! Details Inside. - VICTORIA'S SECR... Inbox 19 KB 1:55 PM

Issa Batarseh Fwd: NSF-Cyber-Enabled Discovery and Innovation - FYI Sent from my iPhone Inbox 8 KB 11:05 AM

Donald J Ross RE: Draft Presentation - Attached is the final version of the presentation. We ... Inbox 1 MB 10:35 AM

Michael Georgopoulos Qual Reviews for our Pre-PhDs in Fall 2009 - Dear all, This is the e-mail that we ... Inbox 528 KB 8:49 AM

Essam Radwan Research Stats for the month of October - Attached is a list of new research pr... Inbox 165 KB 6:03 AM

**Subject: Form Post from Firefox**

▼ Sent By "Mark Llewellyn" <markl@eecs.ucf.edu> On: November 10, 2009 3:14 PM

To: markl

Name=Mark Llewellyn  
Email=markl@cs.ucf.edu  
Comments=This is a great class!  
I  
think  
it  
is  
the  
best

Internet | Protected Mode: Off

100%



# New XHTML Tags:

- There are a number of basic form elements that are used to gather information from the Web site visitor. Some of these are:
  - Text boxes:
  - Scrolling text boxes
  - Select lists
  - Radio buttons
  - Check boxes
  - Buttons
- XHTML tags that configure these form elements include the `<input />`, `<textarea>`, `<select>`, and `<option>` tags.
- We'll look at a number of these form elements in detail now.

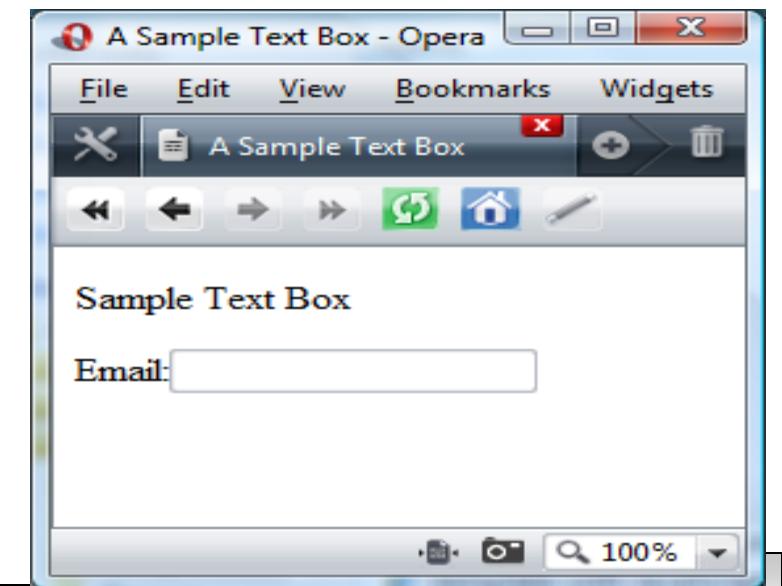
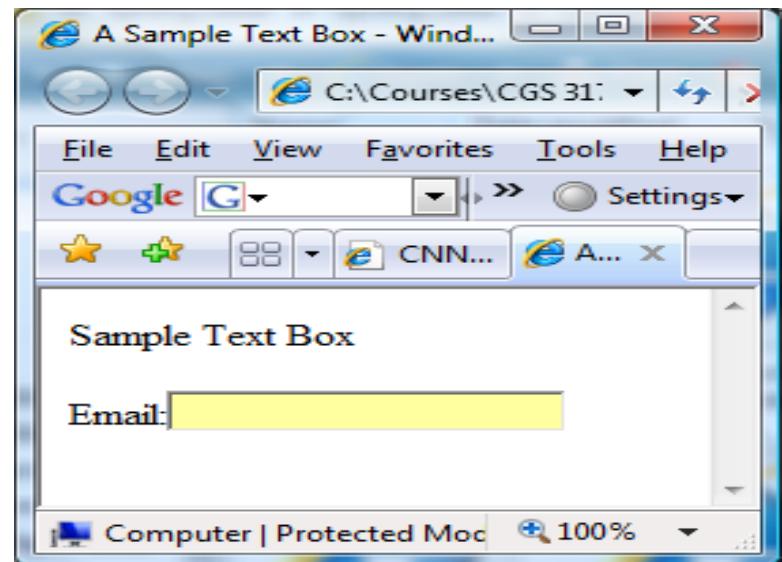


# Form Element: Text Box

- Text boxes are configured by the `<input type="text" />` tag.
- Text boxes accept text or numeric information.

## Example:

```
<?xml version="1.0" encoding="UTF-8"
standalone="no"?>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0
Strict//EN"
 "http://www.w3.org/TR/xhtml1/DTD/xhtml1-
strict.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<title>A Sample Text Box</title>
</head>
<body>
 <p> Sample Text Box </p>
<form method="get"
action="mailto:markl@cs.ucf.edu">
 <p>Email:<input type="text" id="email" /></p>
</form>
</body>
</html>
```

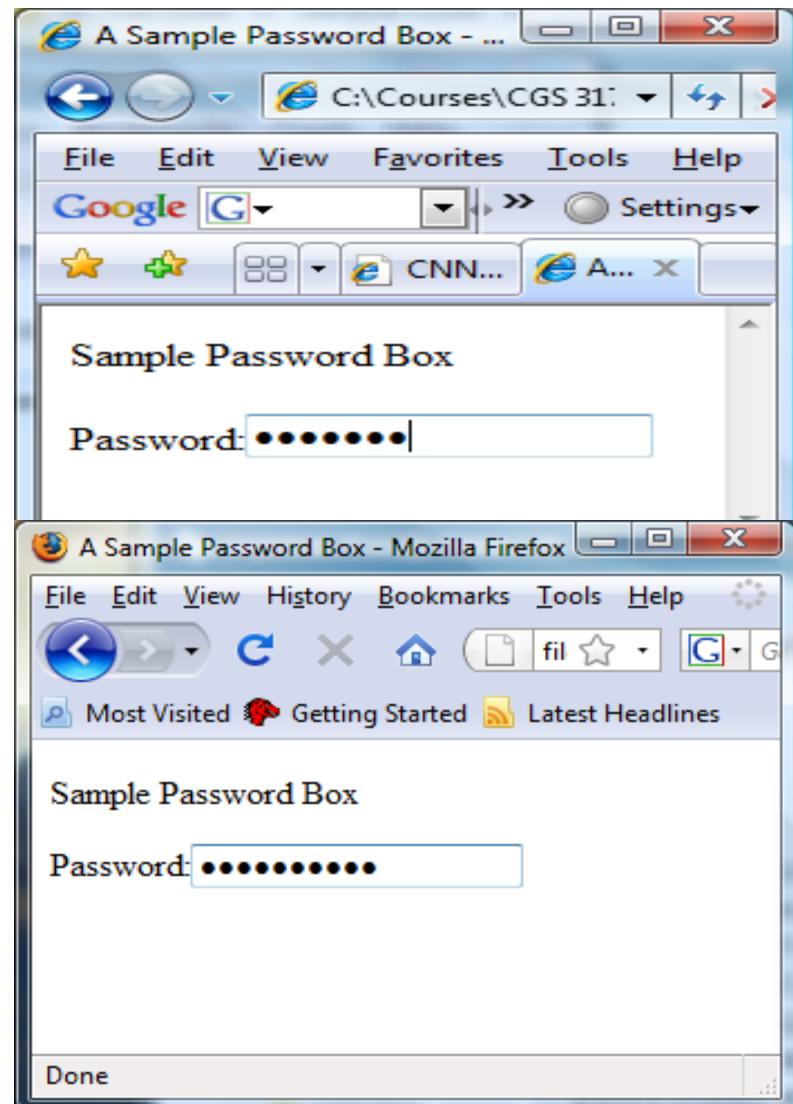


# Form Element: Password Box

- Password boxes are also configured by the `<input type="password" />` tag.
- Password boxes are like text boxes except that they hide data as it is entered.

## Example:

```
<?xml version="1.0" encoding="UTF-8"
standalone="no"?>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0
Strict//EN"
 "http://www.w3.org/TR/xhtml1/DTD/xhtml1-
strict.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<title>A Sample Password Box</title>
</head>
<body>
 <p> Sample Password Box </p>
<form method="get"
action="mailto:markl@cs.ucf.edu">
    <p>Password:<input type="password" id="psswd"
/></p>
</form>
</body>
</html>
```



# Attributes For Text and Password Boxes

Common Attributes	Values	Usage
type	"text", "password"	Configures the text box input type.
id	Alphanumeric, no spaces, begins with a letter	Provides a unique identifier for the form element.
size	Numeric	Configures the width of the text box as displayed by the browser. If size is omitted, the browser displays the text box with its own default size.
maxlength	Numeric	Configures the maximum length of data accepted by the text box.
value	Text or numeric characters	Assigns an initial value to the text box that is displayed by the browser. Accepts the information typed in the text box. This value can be accessed by client-side scripting languages and by server-side processing.

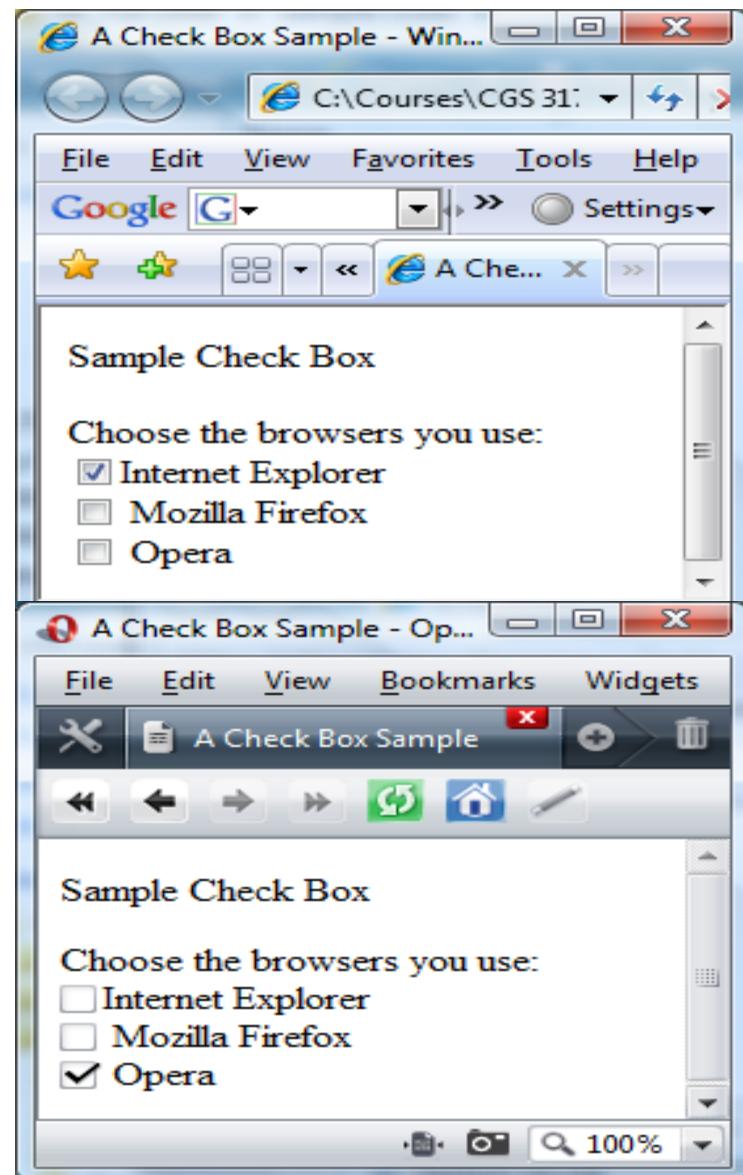


# Form Element: Check Box

- Check boxes are also configured by the `<input />` tag.
- Check boxes allow the user to select one or more of a group of predetermined items.

## Example:

```
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN"
 "http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<title>A Check Box Sample</title>
</head>
<body>
<p> Sample Check Box </p>
<form method="get" action="mailto:markl@cs.ucf.edu">
    <p>Choose the browsers you use:<br />
        <input type="checkbox" id="IE" value="yes" checked="" />Internet Explorer <br />
        <input type="checkbox" id="Mozilla" value="yes" /> Mozilla Firefox <br />
        <input type="checkbox" id="Opera" value="yes" /> Opera <br />
    </p>
</form>
</body>
</html>
```



# Attributes For Check Boxes

Common Attributes	Values	Usage
type	"checkbox"	Configures the check box.
id	Alphanumeric, no spaces, begins with a letter	Provides a unique identifier for the form element.
checked	"checkbox"	Configures the check box to be checked by default when displayed by the browser.
value	Text or numeric characters	Assigns a value to the check box that is triggered when the check box is checked. This value can be accessed by client-side and server-side processing.



# Form Element: Radio Button

- Radio buttons are also configured by the `<input />` tag.
- Radio buttons allow the user to select exactly one item from a group of predetermined items.

## Example:

```
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN"
 "http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<title>A Radio Button Sample</title>
</head>
<body>
<p> Radio Button Sample </p>
<form method="get" action="mailto:markl@cs.ucf.edu">
    <p>Indicate your Gender:<br />
        <input type="radio" name="gender" id="gf"
value="female" />Female <br />
        <input type="radio" name="gender" id="gm"
value="male" />Male <br />
    </p>
</form>
</body>
</html>
```

The figure displays two screenshots of web browsers, Internet Explorer and Mozilla Firefox, both showing the same "Radio Button Sample" page. The page content is identical in both cases:

**Radio Button Sample**

Indicate your Gender:

Female  
 Male

In the Internet Explorer screenshot (top), the "Female" radio button is selected (indicated by a blue outline). In the Mozilla Firefox screenshot (bottom), the "Male" radio button is selected (indicated by a blue outline).



# Attributes For Radio Buttons

Common Attributes	Values	Usage
type	"radio"	Configures the radio button.
name	Alphanumeric, no spaces, begins with a letter	<b>REQUIRED</b> – All radio buttons in a group must have the same name. This attribute also names the form element for access\by client and server side scripts.
id	Alphanumeric, no spaces, begins with a letter	Provides a unique identifier for the form element.
checked	"checked"	Configures the radio button to be selected by default when displayed by the browser.
value	Text or numeric characters	Assigns a value to the radio button that is triggered when the radio button is checked. This should be a unique value for each radio button in a group. This value can be accessed by client-side and server-side processing.

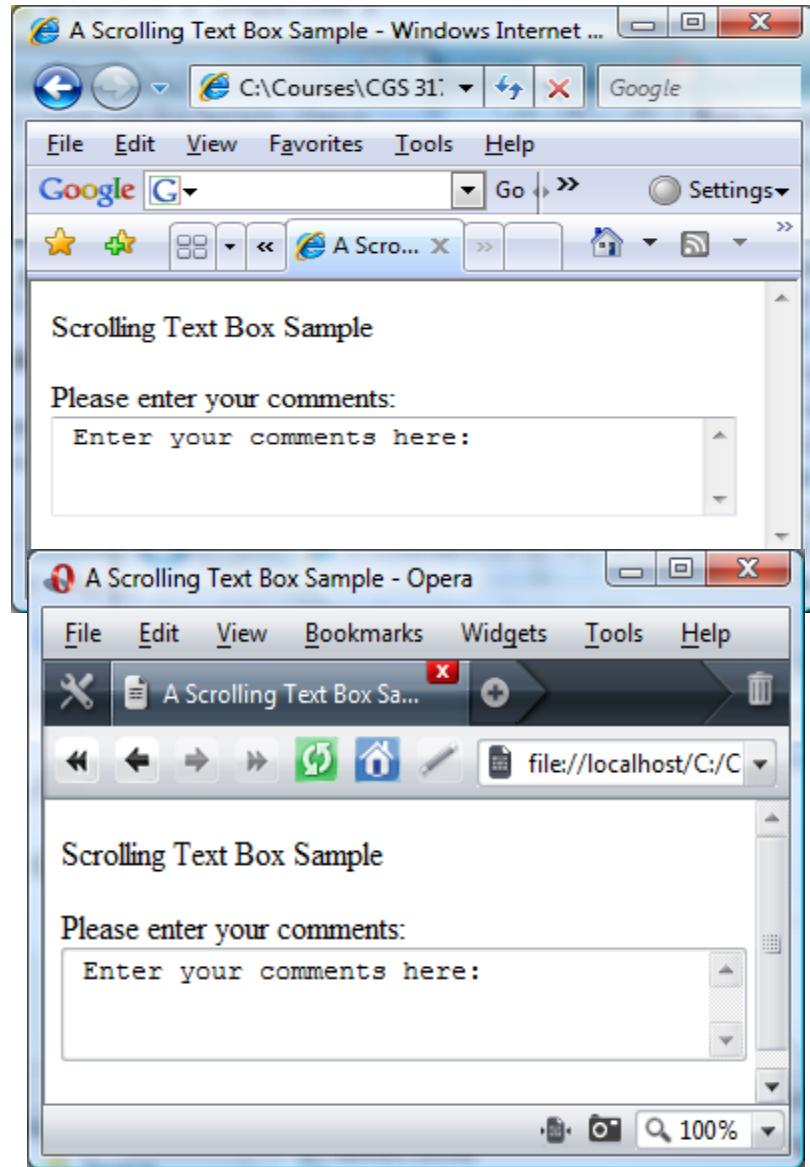


# Form Element: Scrolling Text Box

- The <textarea> container tag configures a scrolling text box. A scrolling text box is used for accepting free-form comments, questions, or descriptions.

## Example:

```
<?xml version="1.0" encoding="UTF-8"  
standalone="no"?>  
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0  
Strict//EN"  
    "http://www.w3.org/TR/xhtml1/DTD/xhtml1-  
strict.dtd">  
<html xmlns="http://www.w3.org/1999/xhtml">  
<head>  
<title>A Scrolling Text Box Sample</title>  
</head>  
<body>  
    <p> Scrolling Text Box Sample </p>  
    <form method="get"  
        action="mailto:markl@cs.ucf.edu">  
        <p>Please enter your comments:<br />  
            <textarea id="comments" cols="40"  
            rows="3"> Enter your comments here:</textarea>  
        </p>  
    </form>  
</body>  
</html>
```



# Attributes For Scrolling Text Boxes

Common Attributes	Values	Usage
<code>id</code>	Alphanumeric, no spaces, begins with a letter	Provides a unique identifier for the form element.
<code>cols</code>	numeric	Configures the width in character columns of the scrolling text box. If <code>cols</code> is omitted, the browser displays the scrolling text box with its own default width.
<code>rows</code>	numeric	Configures the height in rows of the scrolling text box. If <code>rows</code> is omitted, the browser displays the scrolling text box with its own default height.

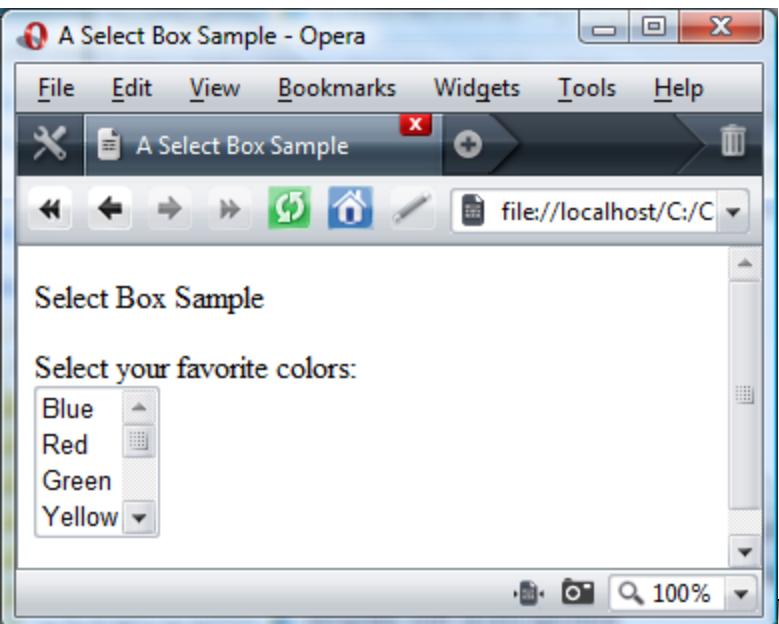
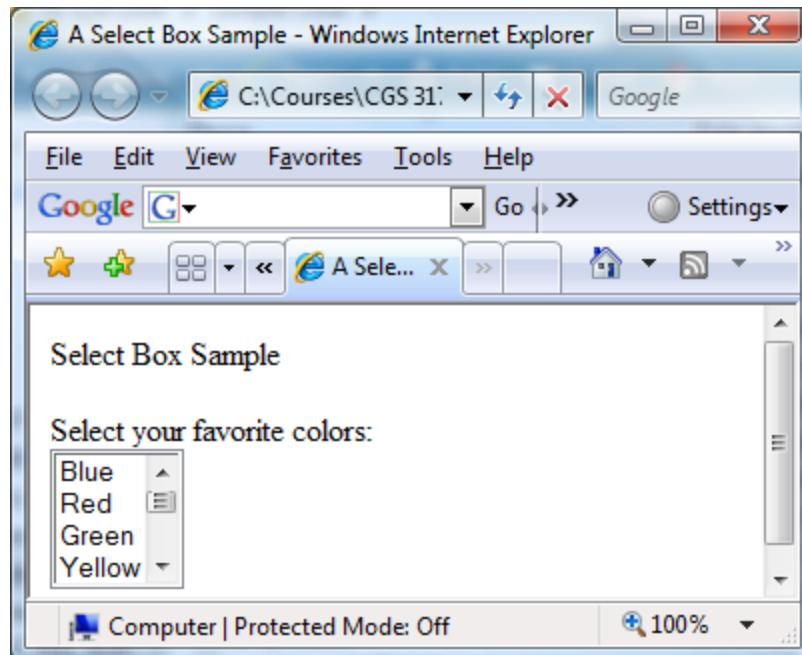


# Form Element: Select List

- The <select> container tag (along with <option> tags) configures a select list. This form element has several names: select list, select box, drop-down list, drop-down box, and option box. It allows the visitor to select one or more items from a list of predetermined choices. The <option> container configures the choices in a select list.

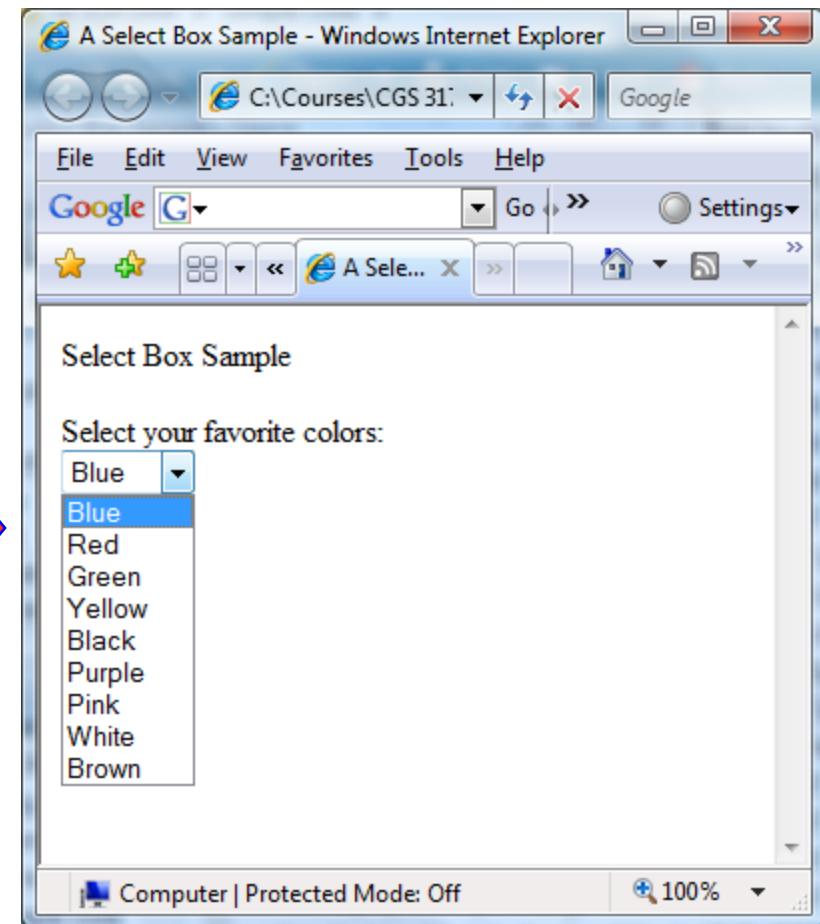
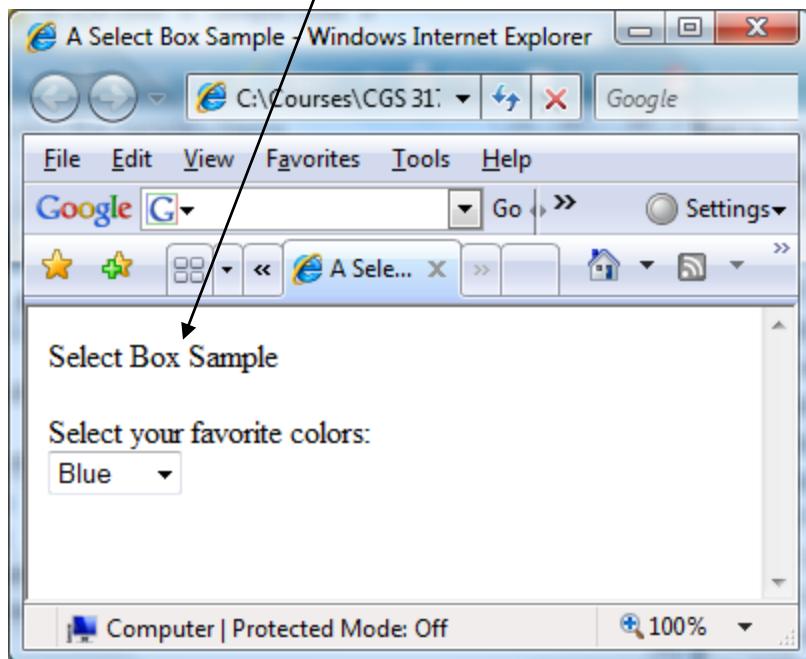
Example:

```
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN"
  "http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<title>A Select Box Sample</title>
</head>
<body>
  <p> Select Box Sample </p>
<form method="get" action="mailto:markl@cs.ucf.edu">
  <p>Select your favorite colors:<br />
    <select id="favcolors" size="4">
      <option value="blue">Blue</option>
      <option value="red">Red</option>
      <option value="green">Green</option>
      <option value="yellow">Yellow</option>
      <option value="black">Black</option>
      <option value="purple">Purple</option>
      <option value="pink">Pink</option>
      <option value="white">White</option>
      <option value="brown">Brown</option>
    </select>
  </p>
</form>
</body>
</html>
```



# Form Element: Select List

With size set to 1 the select list will function as a drop-down box when the arrow is clicked.



# Attributes For Select Lists

Common Attributes	Values	Usage
<select> tag		
<code>id</code>	Alphanumeric, no spaces, begins with a letter	Provides a unique identifier for the form element.
<code>size</code>	numeric	Configures the number of choices the browser will display. If set to one, the element functions as a drop-down list. Scroll bars are automatically added by the browser if the number of options exceeds the space allowed.
<code>rows</code>	numeric	Configures the height in rows of the scrolling text box. If <code>rows</code> is omitted, the browser displays the scrolling text box with its own default height.
<option> tag		
<code>value</code>	Text or numeric characters	Assigns a value to the option. This value can be accessed by client-side and server-side processing.
<code>selected</code>	“selected”	Configures an option to be initially selected when displayed by a browser.

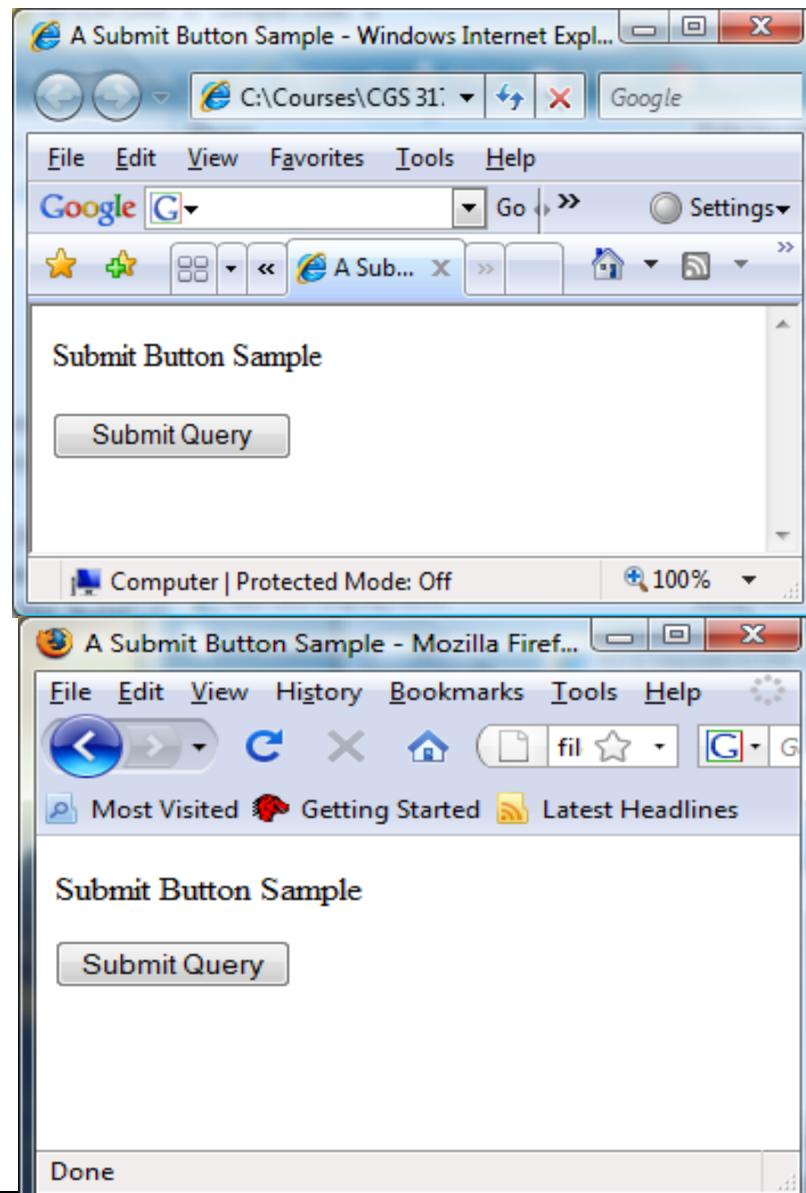


# Form Element: Submit Button

- This form element is configured by the `<input type="submit" />` tag and is used to submit the form. It triggers the action method on the `<form>` tag and causes the browser to send the form data to the Web server. The Web server will invoke the server-side processing listed on the form's action property.

Example:

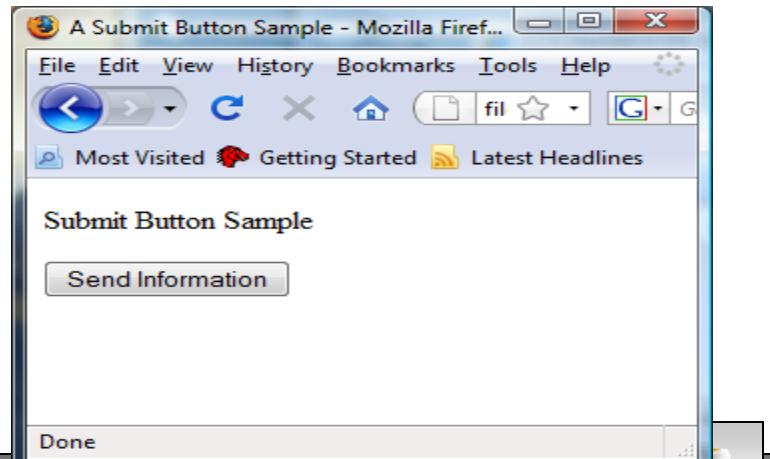
```
<?xml version="1.0" encoding="UTF-8"  
standalone="no"?>  
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0  
Strict//EN"  
    "http://www.w3.org/TR/xhtml1/DTD/xhtml1-  
strict.dtd">  
<html xmlns="http://www.w3.org/1999/xhtml">  
<head>  
<title>A Submit Button Sample</title>  
</head>  
<body>  
    <p> Submit Button Sample </p>  
<form method="get"  
action="mailto:markl@cs.ucf.edu">  
    <p><input type="submit" /></p>  
</form>  
</body>  
</html>
```



# Attributes For Submit Buttons

Common Attributes	Values	Usage
type	"submit"	Configures the submit button.
id	Alphanumeric, no spaces, begins with a letter	Provides a unique identifier for the form element.
value	Text or numeric characters	Configures the text displayed on the submit button. By default, the text "Submit Query" is displayed.

Example of a submit button with the value attribute set to "Send Information".

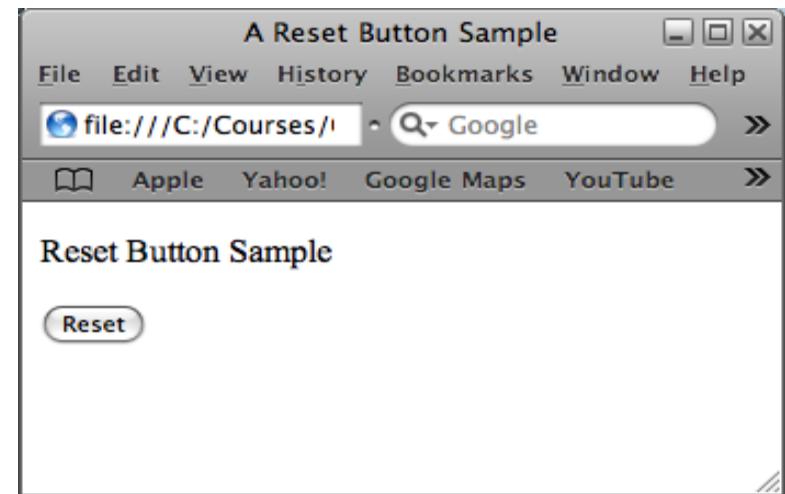
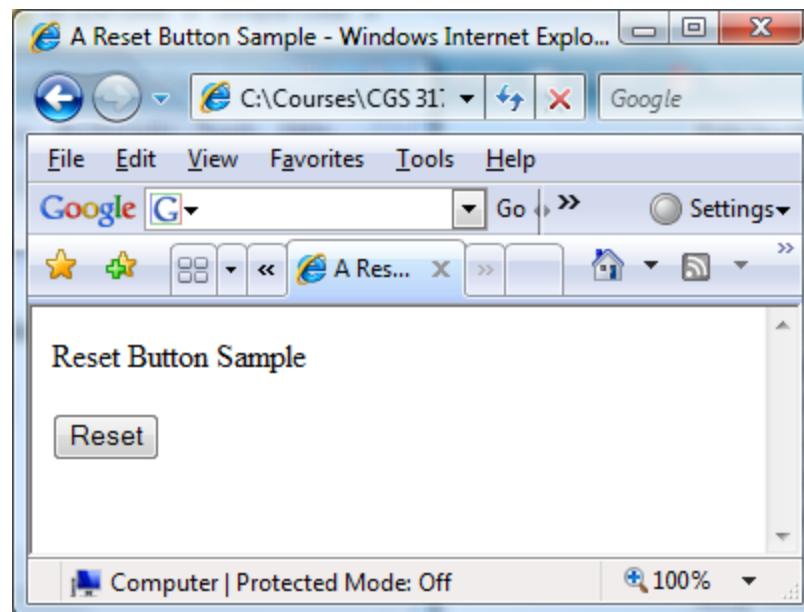


# Form Element: Reset Button

- This form element is also configured by the `<input />` tag and is used to reset the form fields to their initial values.

## Example:

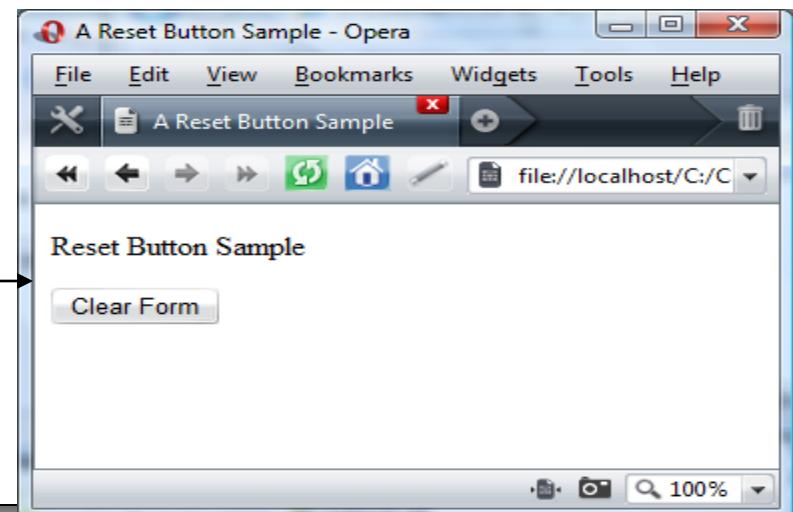
```
<?xml version="1.0" encoding="UTF-8"
standalone="no"?>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0
Strict//EN"
 "http://www.w3.org/TR/xhtml1/DTD/xhtml1-
strict.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<title>A Reset Button Sample</title>
</head>
<body>
<p> Reset Button Sample </p>
<form method="get"
action="mailto:markl@cs.ucf.edu">
<p><input type="reset" /></p>
</form>
</body>
</html>
```



# Attributes For Reset Buttons

Common Attributes	Values	Usage
type	"reset"	Configures the reset button.
id	Alphanumeric, no spaces, begins with a letter	Provides a unique identifier for the form element.
value	Text or numeric characters	Configures the text displayed on the reset button. By default, the text "Reset" is displayed.

Example of a submit button with the value attribute set to "Clear Form".



# Changing Input Properties

- You can change the default appearance of text boxes and password boxes by applying styling to the `<input>` tag.
- As with any property, the `style` property can be applied to tags in either external, internal, or inline (element by element) formats.
- Often you want different style properties to apply to similar elements in a single form, so it is common to apply styling to `<input>` tags on an element by element basis.
- Some examples are shown on the next several pages.

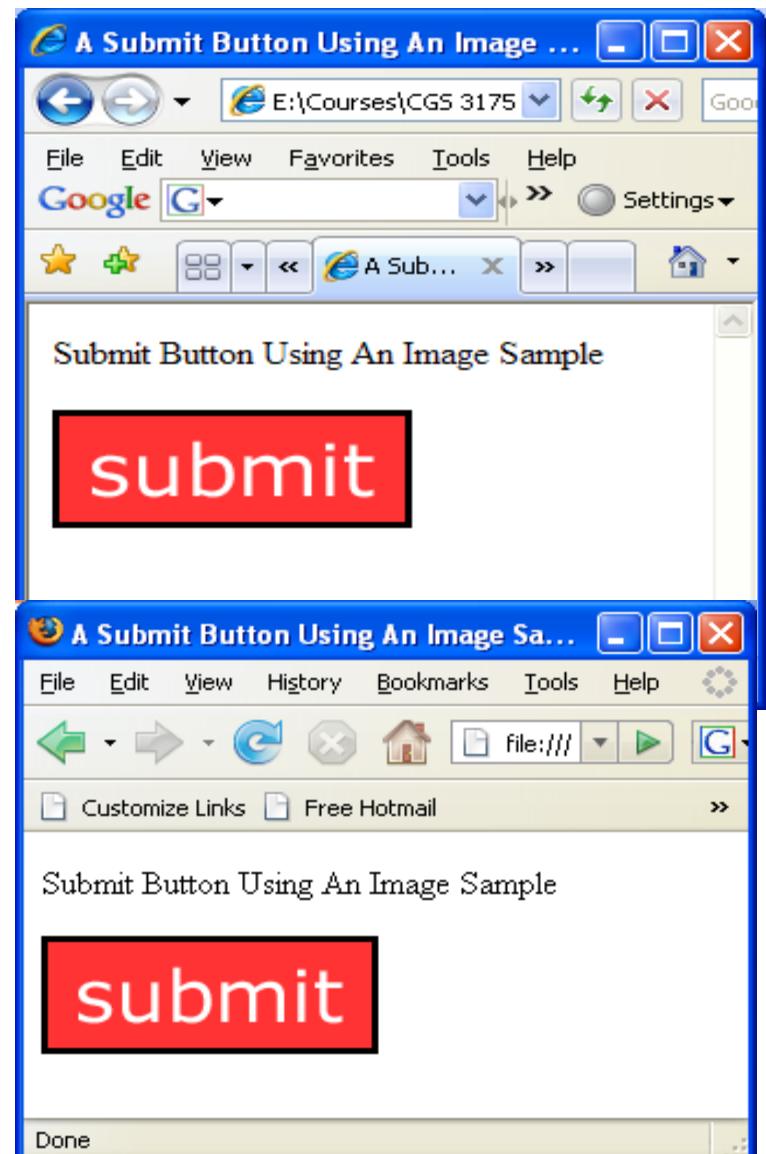


# Using An Image For A Submit Button

- Using image as the type of input control allows you to use an image as a submit button.

## Example:

```
<?xml version="1.0" encoding="UTF-8"  
standalone="no"?>  
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0  
Strict//EN"  
    "http://www.w3.org/TR/xhtml1/DTD/xhtml1-  
strict.dtd">  
<html xmlns="http://www.w3.org/1999/xhtml">  
<head>  
<title>A Submit Button Using An Image  
Sample</title>  
</head>  
<body>  
    <p> Submit Button Using An Image Sample </p>  
    <form method="post"  
        action="mailto:markl@cs.ucf.edu">  
        <p><input type="image" src="submit.gif"  
            style="border:3px solid black" value="Send  
            Information" /></p>  
    </form>  
</body>  
</html>
```



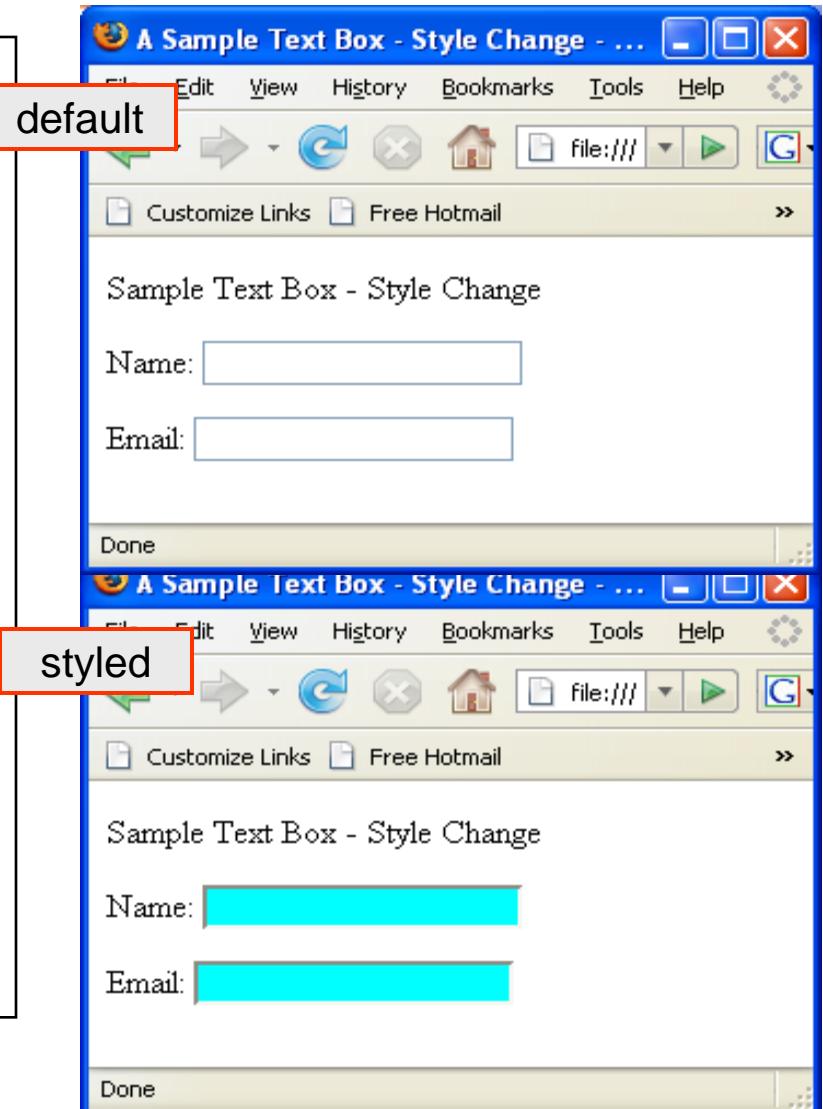
# Applying A Style To All <input> Tags

```
<?xml version="1.0" encoding="UTF-8"
standalone="no"?>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0
Strict//EN"
 "http://www.w3.org/TR/xhtml1/DTD/xhtml1-
strict.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<title>A Sample Text Box - Style Change</title>

<style type="text/css">
  <!-- input { background-color:#00FFFF; } -->
</style>

</head>
<body>
  <p> Sample Text Box - Style Change </p>
<form method="get"
action="mailto:markl2@cs.ucf.edu">
  <p>Name: <input type="text" id="name" /></p>
  <p> Email: <input type="text" id="email" /></p>
</form>
</body>
</html>
```

Change background-color for all <input> tags in this document.

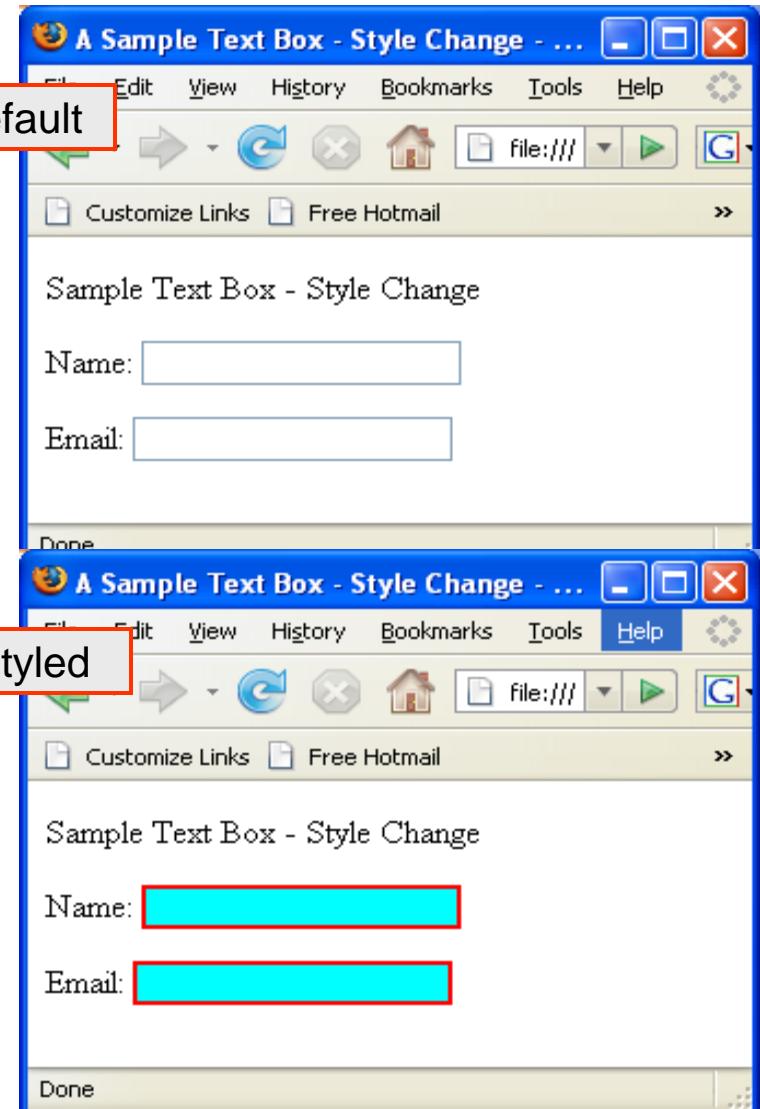


# Applying A Style To All <input> Tags

```
<?xml version="1.0" encoding="UTF-8"  
standalone="no"?>  
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0  
Strict//EN"  
    "http://www.w3.org/TR/xhtml1/DTD/xhtml1-  
strict.dtd">  
<html xmlns="http://www.w3.org/1999/xhtml">  
<head>  
<title>A Sample Text Box - Style Change</title>  
  
<style type="text/css">  
    <!-- input { background-color:#00FFFF;  
                border: solid 2px red; }  
    -->  
</style>  
  
</head>  
<body>  
    <p> Sample Text Box - Style Change </p>  
<form method="get"  
action="mailto:markl2@cs.ucf.edu">  
    <p>Name: <input type="text" id="name" /></p>  
    <p> Email: <input type="text" id="email" /></p>  
</form>  
</body>  
</html>
```

default

styled



# Applying A Style To All <input> Tags

```
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN"
 "http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<title>A Sample Text Box - Style Change</title>
</head>

<body>
<p> Sample Text Box - Style Change </p>
<form method="get"
action="mailto:markl2@cs.ucf.edu">
<p>Name: <input type="text" id="name"
style="background-color:#00FFFF; border:solid 2px red" /></p>
    Style applied to this input tag sets a light blue
    background color and a red solid border.

<p> Email: <input type="text" id="email"
style="background-color:#FFFF00; border:solid 2px black" /></p>
    Style applied to this input tag sets a yellow
    background color and a black solid border.
</form>
</body>
</html>
```

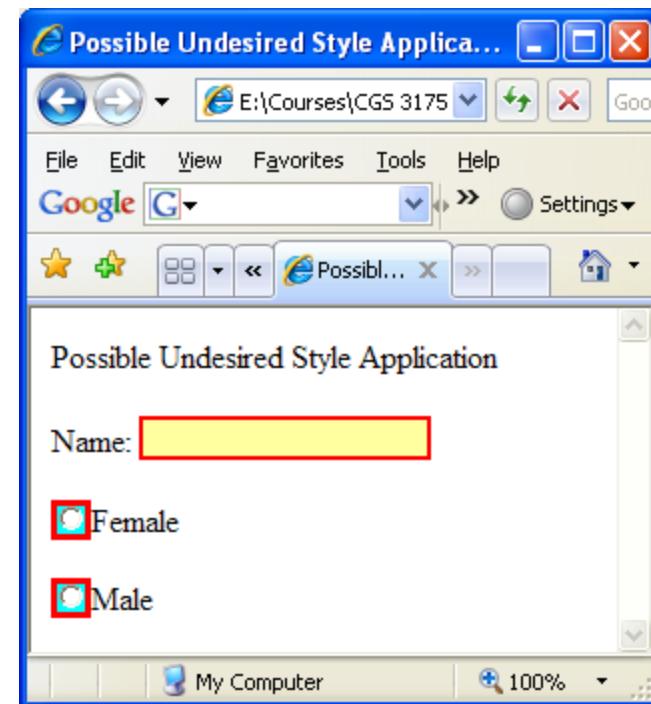
The figure consists of two side-by-side screenshots of a web browser window titled "A Sample Text Box - Style Change".  
The top screenshot, labeled "default", shows two empty text input fields with standard white backgrounds and black borders.  
The bottom screenshot, labeled "styled", shows the same two text input fields. The "name" input field now has a red border and a cyan (light blue) background. The "email" input field now has a black border and a yellow background.  
Both screenshots show the browser's toolbar at the top with icons for back, forward, search, and file operations.



# CAUTION: Undesired Style Application

- When you apply global or document-wide styles to an input selector and the input selector is not defined in a class, all input elements on the page take on the properties defined in the input selector. For example, radio buttons and check boxes assume the properties as well, which is likely to have an undesired effect as shown below.

```
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN"
 "http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<title>Possible Undesired Style Application</title>
</head>
<style type="text/css">
  <!-- input { background-color: #00FFFF;
              border: solid 3px red;
      }
  -->
</style>
<body>
  <p> Possible Undesired Style Application </p>
  <form method="get" action="mailto:markl2@cs.ucf.edu">
    <p>Name: <input type="text" id="name" style="background-
color:yellow; border:solid 2px red" /></p>
    <p><input type="radio" id="gf" value="female" />Female
  </p>
    <p><input type="radio" id="gm" value="male"   />Male </p>
  </form>
</body>
</html>
```



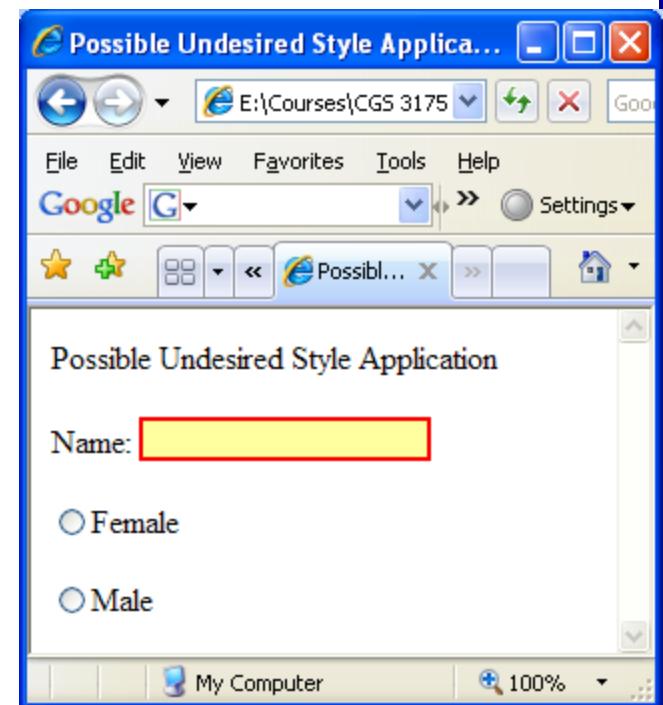
# CAUTION: Undesired Style Application

- Use classes to prevent the effect shown on the previous page as illustrated here:

```
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN"
 "http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<title>Fix For Possible Undesired Style Application</title>
</head>
<style type="text/css">
  .inputboxstyle { background-color: #00FFFF;
    border: solid 3px red;
  }
-->
</style>

<body>
  <p> Fix For Possible Undesired Style Application </p>
  <form method="get" action="mailto:markl2@cs.ucf.edu">
    <p>Name: <input class="inputboxstyle" type="text"
    id="name" style="background-color:yellow; border:solid 2px
    red" /></p>
    <p><input type="radio" id="gf" value="female" />Female
    </p>
    <p><input type="radio" id="gm" value="male"   />Male </p>
  </form>
</body>
</html>
```

Define a class that applies only to certain elements.



# Additional Form Controls - <button>

- In addition to the <input> form element, there are three other form elements: <textarea>, <select> which we've already seen, but additionally there is the <button> element.
- A button you create using the button element is similar to the buttons you create with the input element, except that the content included between the opening and closing button tags appears on the button.
- You can create three different types of buttons using the button element: submit, reset, and button.
- The <button> tag is used to create buttons .



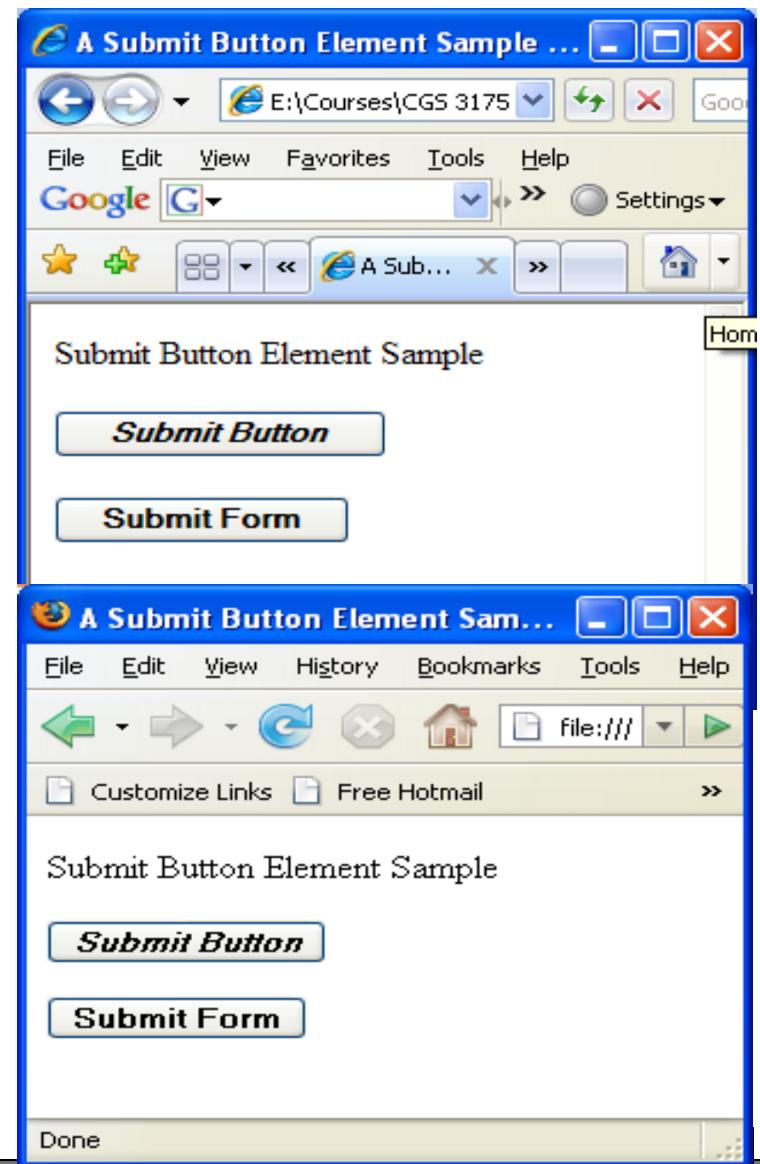
# Attributes For <button> Elements

Common Attributes	Values	Usage
type	"submit", "reset", "button"	Configures the button type.
id	Alphanumeric, no spaces, begins with a letter	Provides a unique identifier for the form element.
value	Text or numeric characters	Assigns a value to the radio button that is triggered when the radio button is checked. This should be a unique value for each radio button in a group. This value can be accessed by client-side and server-side processing.



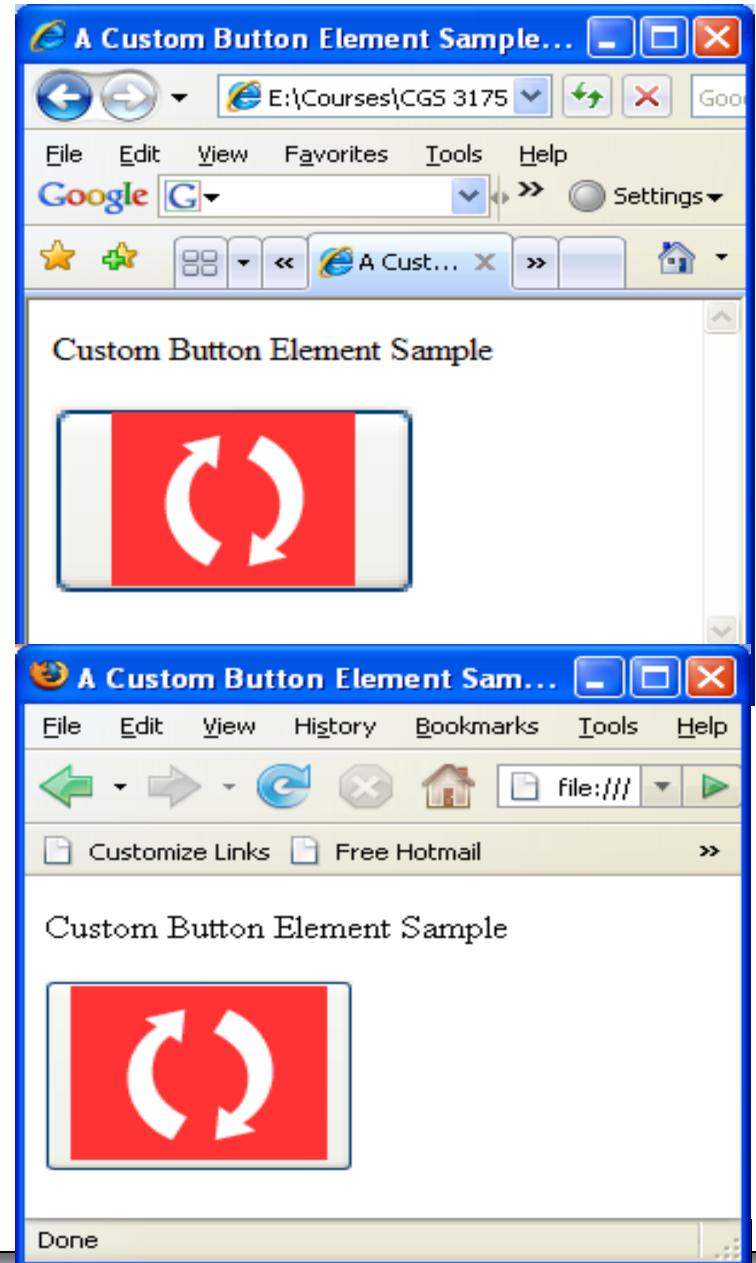
# Using A <button> Element

```
<?xml version="1.0" encoding="UTF-8"
standalone="no"?>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0
Strict//EN"
    "http://www.w3.org/TR/xhtml1/DTD/xhtml1-
strict.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<title>A Submit Button Element Sample</title>
</head>
<body>
    <p> Submit Button Element Sample </p>
<form method="get"
action="mailto:markl@cs.ucf.edu">
    <p><button type="submit" id="submit"
value="submit information"><b><i>Submit
Button</i></b></button></p>
    <p><button type="submit" id="submit"
value="submit information"><b>Submit
Form</b></button></p>
</form>
</body>
</html>
```



# Using A <button> Element

```
<?xml version="1.0" encoding="UTF-8"  
standalone="no"?>  
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0  
Strict//EN"  
    "http://www.w3.org/TR/xhtml1/DTD/xhtml1-  
strict.dtd">  
<html xmlns="http://www.w3.org/1999/xhtml">  
<head>  
<title>A Custom Button Element Sample</title>  
</head>  
<body>  
    <p> Custom Button Element Sample </p>  
<form method="get"  
action="mailto:markl@cs.ucf.edu">  
    <p><button type="button" id="recycle"  
value="recycleform"></button></p>  
</form>  
</body>  
</html>
```



# Grouping Controls With `fieldset` and `legend`

- The `fieldset` element organizes form controls into groupings that are rendered by the Web browser.
- The `legend` element displays a caption for the `fieldset` element.
- To create a `fieldset` element, start with the opening `<fieldset>` tag followed by the `<legend>` tag.



# Using <fieldset> And <legend> Elements

```
<?xml version="1.0" encoding="UTF-8"  
standalone="no"?>  
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0  
Strict//EN"  
    "http://www.w3.org/TR/xhtml1/DTD/xhtml1-  
strict.dtd">  
<html xmlns="http://www.w3.org/1999/xhtml">  
<head>  
<title> Using fieldset </title>  
</head>  
<body>  
    <fieldset>  
        <!-- <legend style="color:green">Oatmeal  
Varieties</legend> -->  
        <legend> Oatmeal Varieties</legend>  
        <label>Apple Cinnammon<input type="radio"  
id="applecinnammon" /></label><br />  
        <label>&nbsp; &nbsp; &nbsp; &nbsp; Nutty  
Crunch<input type="radio" name="rb"  
id="nuttycrunch" /></label><br />  
        <label>&nbsp; &nbsp; &nbsp; &nbsp; Brown  
Sugar<input type="radio" name="rb" id="brownsugar"  
/></label><br />  
    </fieldset>  
</body>  
</html>
```

Use this to override  
default browser color.

The image displays two browser windows side-by-side. Both show the same XML-based XHTML page with a legend and three radio buttons. In Internet Explorer (top), the legend text 'Oatmeal Varieties' is displayed in green, as specified in the XML. In Mozilla Firefox (bottom), the legend text is displayed in black, which is the default color for legends in most browsers. A callout box with the text 'Use this to override default browser color.' points to the style attribute in the XML code.

**Internet Explorer Screenshot:**

Oatmeal Varieties

Apple Cinnammon

Nutty Crunch

Brown Sugar

**Mozilla Firefox Screenshot:**

Oatmeal Varieties

Apple Cinnammon

Nutty Crunch

Brown Sugar



## Practice Problems

1. Create the form as shown on page 50.
2. Modify the form from problem 1 so that it uses the <fieldset> tag to group the check boxes together as well as the radio boxes. It should look like the form on page 51.
3. Create the XHTML document that would produce the form shown on page 52.



## Music Survey

Name:

E-mail:

### Select Your Favorite Types Of Music

- Pop
- Rock
- Hip-Hop
- Classical
- Country
- Folk
- Other

### Select how often you purchase music CDs:

- Daily
- Weekly
- Monthly
- A few times each year
- Never

Comments:



## Music Survey

Name:

E-mail:

Select Your Favorite Types Of Music

- Pop
- Rock
- Hip-Hop
- Classical
- Country
- Folk
- Other

Select how often you purchase music CDs:

- Daily
- Weekly
- Monthly
- A few times each year
- Never

Comments:



Advanced XHTML & CSS - Forms - Practice Problem 3

File Edit View History Bookmarks Window Help

file:///C:/Courses/CGS%203175%20-%20Inte Google News (118) Popular

## Please Complete Our Survey

First Name:  MI:  Last Name:

City:  State:  Zip code:

Choose Your Favorite Sport

Cycling  
 Softball  
 Formula One  
 Table Tennis

Choose Your Class

Freshman  
 Sophomore  
 Junior  
 Senior

Choose Your Favorite Food

Pizza  
Mexican  
Chinese  
Burgers and Fries

Please let us know your comments on our site --

Submit Survey Clear Form

