

IST 361 | Web Development

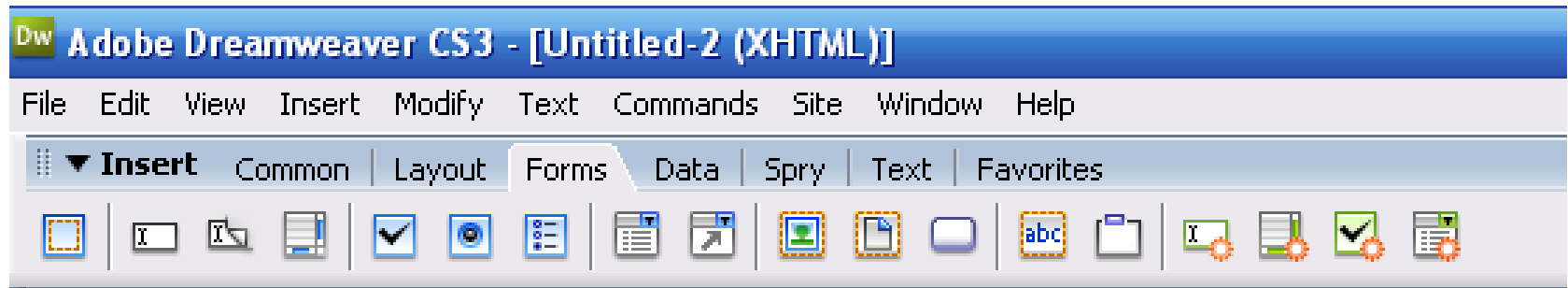
Class 10 - Lecture notes

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Forms

- Forms provide a method of interaction between users and the publisher of the web site. With forms, you can use input from a user to provide a customized response, or just collect the data for later use.
- Forms can be used for simple functions like surveys or online registrations, and they are the element that makes a complex online commerce system possible (Niederst 2001).
- This class - a detailed review of the available form elements and how to use them.
- Next class –
 - introduction to CGI and JavaScript
 - exercise on how to make your forms work

Forms tab in Dreamweaver



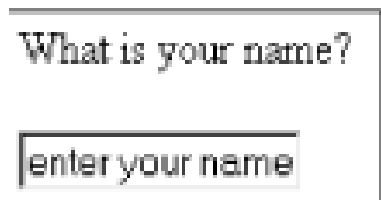
- Text fields
- Text areas
- Radio buttons
- Checkboxes
- Lists
- Jump menus
- Buttons

Form tag

- **<form> ... </form>**
- Indicates the beginning and end of a form. There can be more than one form in an HTML document, but forms cannot be nested inside one another, and it is important that they do not overlap.
- *Attributes*
 - **action=url**
 - *Required.* Specifies the URL of the application that will process the form (we will study this next class, with FormMail.cgi)
 - **method=get/post**
 - Specifies which HTTP method will be used to submit the form data. With get (the default), the information is appended to and sent along with the URL itself. Post method transmits the form input information separated from the URL .

Form elements/controls

- **Input Controls: <input>**
 - The controls described in the following sections are entered as attribute options within the <input> tag.
- **Text entry (type=text)**
 - The simplest type of form element is the text entry field (type=text), which is the default setting for the <input> element. This field allows the user to enter text. By default, the browser displays a text-entry box that is 20 characters wide, but you can set it to be any length using the **size** attribute.
 - By default the user can type an unlimited number of characters into the field, but you can set a maximum number of characters using the **maxlength** attribute.
 - <P>What is your name?</P>
 - <INPUT TYPE="text" NAME="name" SIZE="18" MAXLENGTH="50" VALUE="enter your name">



```
What is your name?  
enter your name
```

Form elements/controls

- **Checkbox (type=checkbox)**

- Checkboxes are typically used for multiple-choice questions. They work best when more than one answer is acceptable. When the box is checked, the corresponding value is transmitted with the form to the processing program on the server.
- By default a checkbox is not checked; to make it checked when the page loads, simply add the checked attribute to the corresponding `<input>` tag.
- If you assign a group of checkboxes the same name, they behave like a multiple-choice list in which the user can select more than one option for a given property, as shown in the following code.

```
<P>Which of the following operating systems have you used?</P>  
<INPUT TYPE="checkbox" NAME="os" VALUE="Unix" CHECKED> Unix  
<INPUT TYPE="checkbox" NAME="os" VALUE="Win98"> Windows 98  
<INPUT TYPE="checkbox" NAME="os" VALUE="WinNT"> Windows NT  
<INPUT TYPE="checkbox" NAME="os" VALUE="Mac" CHECKED> Macintosh 9.0
```

Which of the following operating systems have you used?

UNIX Windows 98 Windows NT Macintosh 9.0

Form elements/controls

- **Radio button (type=radio)**

- **Radio buttons are used to select among choices. When a radio button is checked, its corresponding value is sent to the server for processing. Radio buttons are different from checkboxes in that when several radio buttons are grouped together by the same name, only one radio button can be selected at one time, as shown in the following code.**

```
<P>Which operating system do you like the best?</P>  
<INPUT TYPE="radio" NAME="os" VALUE="Unix"> Unix  
<INPUT TYPE="radio" NAME="os" VALUE="Win98"> Windows 98  
<INPUT TYPE="radio" NAME="os" VALUE="WinNT"> Windows NT  
<INPUT TYPE="radio" NAME="os" VALUE="Mac" CHECKED> Macintosh 9.0
```

Which operating system do you like the best?

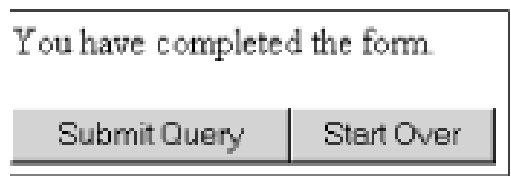
UNIX Windows 98 Windows NT Macintosh 9.0

Form elements/controls

- **Submit and reset buttons (type=submit; type=reset)**
 - Every form needs a submit button control to initiate the transmission of information to the server. By default, the submit button (type=submit) says "Submit" or "Submit Query," but you can change it by adding your own text after the value attribute.
 - The reset button (type=reset) reverts all form controls back to the state they were in when the form loaded (either blank or with default values). The default value (and hence the label for the button) is "Reset," but like the submit button, you can change its text by specifying its value, as shown below.

`<P>You have completed the form.</P>`

`<INPUT TYPE="submit"><INPUT TYPE="reset" VALUE="Start Over">`



Form elements/controls

- **Creating Menus with the <select> Tag**

- The <select> tag creates a menu of options that is more compact than groupings of checkboxes or radio buttons. A menu displays as either a pull-down menu or as a scrolling list of choices, depending on how the size is specified. The <select> tag works as a container for any number of <option>s.
- The text between the opening and ending <option> tags is the value that is sent to the server.

- **Example: Pull-down menu**

```
<P>What is your favorite ice cream flavor?</P>
```

```
<SELECT NAME="ice_cream">
```

```
<OPTION>Rocky Road
```

```
<OPTION>Mint Chocolate Chip
```

```
<OPTION>Pistachio
```

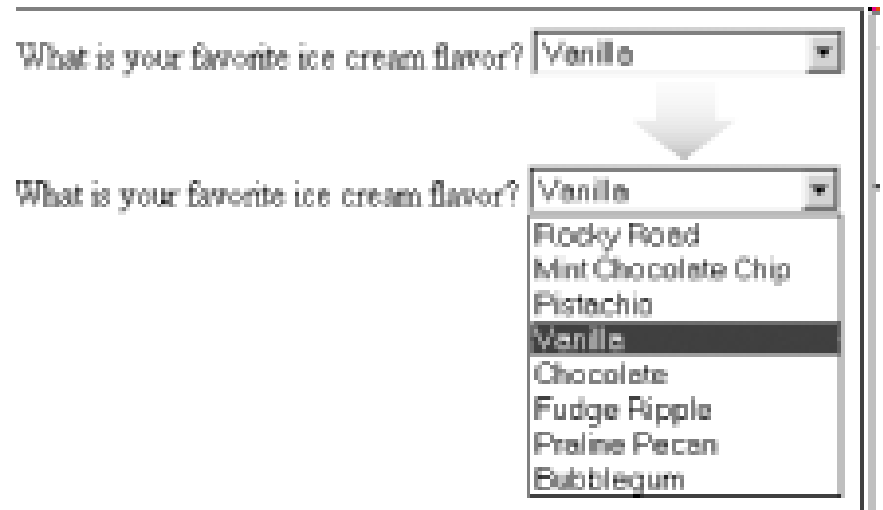
```
<OPTION SELECTED>Vanilla
```

```
<OPTION>Chocolate
```

```
<OPTION VALUE="swirl">Fudge Ripple
```

```
<OPTION>Praline Pecan
```

```
<OPTION>Bubblegum </SELECT>
```



Form tags - summarized

- HTML form tags alone don't make forms work; they merely provide an interface for gathering data. The real work is done by forms-processing applications on the server, such as CGI scripts, ASP, PHP, or Java servlets.
- For simple forms processing, many web developers rely on CGI scripts. CGI (Common Gateway Interface) is the interface between HTTP/web server software (the program responsible for web transactions) and other programs on the server (Introduction to CGI scripts – next class).
- If you are coming at web design from a designer's point of view, chances are you will be handling the HTML form elements and leaving the programming to trained programmers. Often, ISPs provide a few common CGI scripts, such as a guestbook or mailing function, that you can point to from within your form.

Aligning Form elements

- A page with lots of form elements can get ugly in a hurry.
- The best favor you can do for a form is to align the elements in some orderly fashion.
- You can use tables to align the form elements.
- *Keep in mind for better results :*
 - Form elements tend to be rendered with extra space above and below. This can be problematic when trying to fit a form into a tight table cell.
 - If you want to lay out a form with a table, it is better to put the <table> element within the <form> element instead of the other way around.
 - [Registration Form Example](#)

Templates

- Templates in Dreamweaver
 - Open new file, “Create from Samples”
- Templates on the WWW
 - <http://www.oswd.org/>

- **Assignment 5 (form)** – due next class, see course homepage for more details
- **Team 4 Presentation**
- **Team 5 (Flash)** – see me after class, you are presenting next class

Reference



- *Web Design in a Nutshell* by Jennifer Niederst
 - Chapter 15. Forms
 - Available online from UAlbany library page <http://library.albany.edu/>
- Additional Links
 - Styling forms with CSS
 - [Part 1: Accessibility and styling form elements](#)
 - [Part 2: CSS-structured forms](#)
 - [Part 3: Two-column form layout](#)