Web Technologies
BITE304L

Module-1:

HTML Forms

Working with HTML Forms

- Defining Form Elements
- Formatting Text Fields
- Formatting Password Fields
- Formatting Submit and Reset Buttons
- Formatting Check Boxes
- Formatting Radio Buttons
- Formatting Text Areas
- Formatting Selection Menus
- Formatting Selection Lists
- Formatting File Fields
- Using Graphic Images for Submit Buttons
- Using Hidden Fields
- Specifying the Focus Order of Form Controls
- Using Field Sets

12/19/2024

HTML Forms

- HTML forms are used to pass data to a server.
- An HTML form can contain input elements like
  - text fields
  - Checkboxes
  - Radio-buttons
  - Submit buttons and more.
- A form can also contain select lists, textarea, fieldset, legend, and label elements.
- `<form>` tag -> *Defines an HTML form for user input*

  `<form method="post/get" action="inbox.html">`
  `....input elements.....`
  `</form>`

text box

First Name ☐   Last Name ☐

Address #1 ☐

Address #2 ☐

City ☐   State ☐   Zip ☐

Country ☐

Item Purchased ☐▼   Purchase Date ☐

drop-down list box

Serial Number ☐

group box

Used For (check one)
- ○ Home
- ○ Business
- ○ Religious or Charitable Institution
- ○ Government
- ○ Educational Institution

Network Operating System (check all that apply)
- ☐ Netware
- ☐ Banyan Vines
- ☐ Windows
- ☐ IBM Lan Server
- ☐ PC/NFS

radio buttons

check boxes

Comments?: ☐

text area

Send Registration   Cancel

form button

Forms

- HTML forms are used to pass data to a server.

- A form can contain input elements like text fields, checkboxes, radio-buttons, submit buttons and more. A form can also contain select lists, textarea, fieldset, legend, and label elements.

<form method="post/get" action="inbox.html">

….input elements…..

</form>

- *method* - We will only be using the post functionality of method, which sends the data without displaying any of the information to the visitor.

- *action* - Specifies the URL to send the data to.

<form> tag attributes

- **name –** Specifies the name of a form.

- **method** -Specifies the HTTP method to use when sending form-data (GET and POST).

- **action** -Specifies where to (URL) send the form-data when a form is submitted.

- **target** - Specifies where to display the response that is received from server after submitting the form. (_blank, _self,_parent and _top).

- **accept –** Specifies the types of files that the server accepts (that can be submitted through a file upload)

- **enctype** - Specifies how the form-data should be encoded when submitting it to the server (only for method="post")

  - application/x-www-form urlencoded,multipart/form-data and text/plain

<input> tag

- It specifies an input field where the user can enter data.

- <input> elements are used within a <form> element to declare input controls that allow users to input data.

- An input field can vary in many ways, depending on the type attribute.

- It is an unpaired tag.

<input> tag attributes

- **type** -Specifies the type <input> element to display
  - text,password,submit,reset,checkbox,radio,file,image,hidden
  - color,date,datetime,month,range,number,datetime-local,email,search
- **name** - Assigns a name to the given field so that you may reference it later.
- **size** - Sets the horizontal width of the field or Specifies the width, in characters
- **maxlength** - Specifies the maximum number of characters allowed in an <input> element
- **value** - Specifies the value of an <input> element
- **checked** – Specifies that an <input> element should be pre-selected when the page loads (for type="checkbox" or type="radio")
- **disabled** - Specifies that an <input> element should be disabled
- **src** - Specifies the URL of the image to use as a submit button (only for type="image")

Formatting TextFields

- Form controls that accept data to be entered by user are generically referred to as *text boxes.*
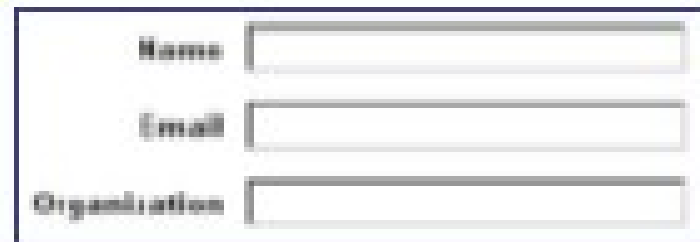
E.g:-

<form method="post" action="xyz.asp">

Name:<input type="text" name="first_name" size="20" maxlength="20" value="First Name Here">

Email: <input type="text" size="10" maxlength="10" name="email" value="Email here">

Organization: <input type="text" size="10" maxlength="10" name="email" value="Organization here">

</form>

Formatting Password Fields

- Logically enough, accept passwords.

- It offers no sophisticated security. It doesn't encrypt or scramble the information in any way.
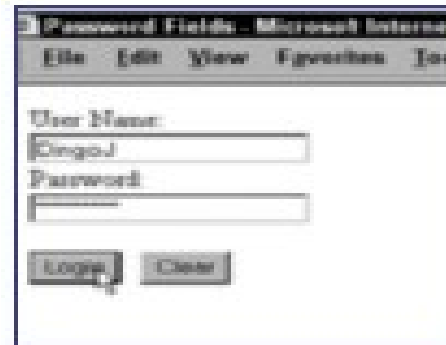
E.g:-

<form method="post" action="xyz.asp">

User Name:<input type="text" name="User_name" size="20" maxlength="20" >

Password: <input type="Password" size="10" maxlength="10" name ="password">

</form>

Formatting Submit and Reset Buttons

- To send the completed form to the server (the Submit button) or to clear the form if they've made a mistake (the Reset button).

- E.g:-

<form method="post" action="xyz.asp">

User Name:<input type="text" name="User_name" size="20" maxlength="20" >

Password: <input type="Password" size="10" maxlength="10" name ="password">
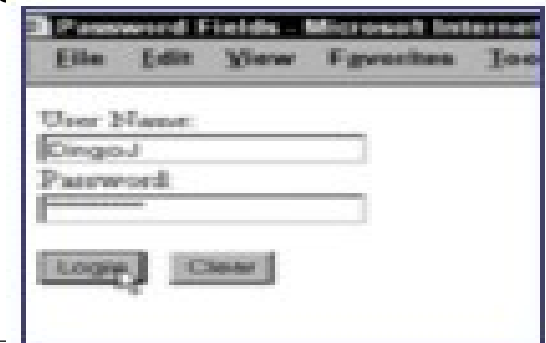
<input type="submit" value="Login" name="submit">

<input type="reset" value="Clear" name="reset">

</form>

Formatting Check Boxes

- *Check boxes allow for multiple items to be selected for a certain group of choices.*

- The check box's *name* and *value* attributes behave.

- It is possible to precheck the input boxes for your viewers using the *checked* attribute.

- Simply set the checked attribute to *yes* or *no*.

E.g:-

```
<form method="post" action="xyz.asp">
Please select every sport that you play.<br>
Vollyball: <input type="checkbox" name="sports" value="vollyball" ><br>
Football: <input type="checkbox" name="sports" value="football" checked="yes"> <br>
Baseball: <input type="checkbox" name="sports" value="baseball"> <br>
Basketball: <input type="checkbox" name="sports" value="basketball">
</form>
```

R.Vijayan/ AP(SG) / SITE / VIT University

12/19/2024
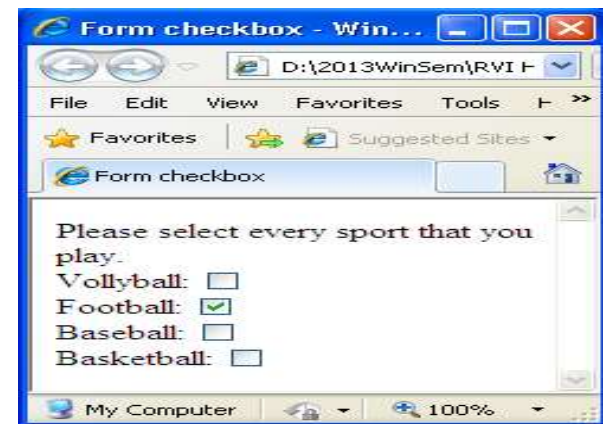
Formatting Radio Button

- Radios are types of input forms that allow a user to pick an either/or type of selection.

- *value* - specifies what will be sent if the user chooses this radio button. Only one value will be sent for a given group of radio buttons.

- **name** - defines which set of radio buttons that it is a part of. Below we have 2 groups: shade and size.

- By using the checked attribute, we can tell our form to automatically "check" a default radio button.

E.g:-

<form method="post" action="xyz.asp">
 What kind of shirt are you wearing?
Shade:
<input type="radio" name="shade" value="dark">Dark
<input type="radio" name="shade" value="light">Light
Size:
<input type="radio" name="size" value="small" checked="yes">Small
<input type="radio" name="size" value="medium">Medium
<input type="radio" name="size" value="large">Large
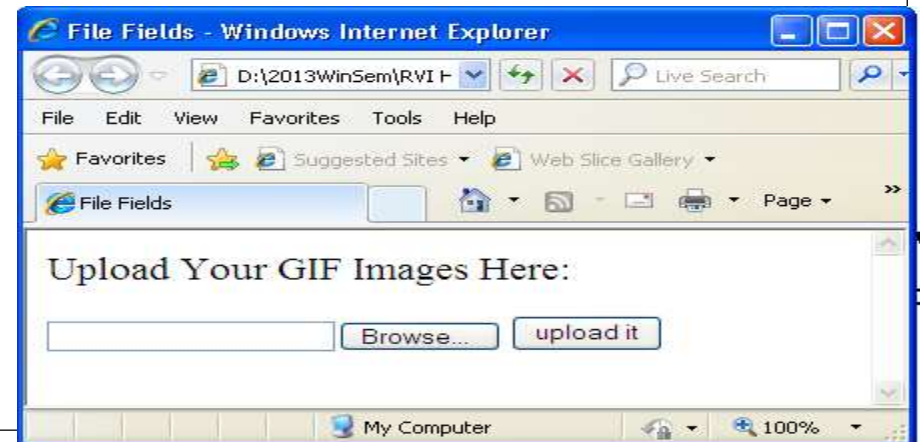</form>

13

Formatting File Fields

- It allow your site's visitors to upload files from their hard drive to the Web server.

- The file field appears as a text field with a Browse button to the right.

- E.g:-
```
<html>
<head>
<title>File Fields</title>
</head>
<body>
<form action="/cgi-bin/image_files.pl" method="post">
<p>Upload Your GIF Images Here:</p>
<input type="file" name="upload" size="20" accept="image/gif" >
<input type="submit" value="upload it">
</form>
</body>
</html>
```


R.Vijayan/ AP(SG) / SITE / VIT University

Use of <label> tag

```
<html>
<body>

<p>Click on one of the text labels to toggle the related control:</p>

<form action="demo_form.asp">
  <label for="male">Male</label>
  <input type="radio" name="sex" id="male" value="male"><br>
  <label for="female">Female</label>
  <input type="radio" name="sex" id="female" value="female"><br><br>
  <input type="submit" value="Submit">
</form>

</body>
</html>
```

Formatting TextAreas using <textarea>

- A large, scrollable, multiline text window. It is most commonly used for collecting extended written comments.

- It retrieve "block" type information from the user. Paragraphs, essays, or memos can by cut and pasted into textareas and submitted.

- It is a paired tag.

- Attributes:

  - **name-** Specifies a name for a text area.
  - **cols -** Specifies the visible width(no. of characters in a line) of a text area.
  - **rows-** Specifies the visible number of lines in a text area
  - **disabled -** Specifies that a text area should be disabled.
  - **wrap-** Specifies how the text in a text area is to be wrapped when submitted in a form either hard and soft

- *wrap* attribute refers to how the text reacts when it reaches the end of each row in the text field.
- Wrapping can be one of three settings: soft, hard, off
  - *Soft* forces the words to wrap once inside the text area but when the form is submitted, the words will no longer appear as such (Line breaks will not be added).
  - *Hard* wraps the words inside the text box and places line breaks at the end of each line so that when the form is submitted it appears exactly as it does in the text box.

\<textarea cols="20" rows="5" wrap="hard"\>

As you can see many times word wrapping is often the desired

look for your textareas. Since it makes everything nice and

easy to read.

\</textarea\>

\<textarea\> example

\<form action="/cgi-bin/comments.pl" method="post"\>

User Name:\<br\>

\<input type="text" name="user_name" width"30" maxlength="20"\>

\<br\>

Enter Your Comments Here:\<br\>

\<textarea name="comments" cols=40 rows=7 wrap="hard"\>\</textarea\>

\<br\>

\<!-- Submit & Reset Buttons --\>

\<input type="submit" value="Send Me" \>

\<input type="reset" value="Clear Me" \>

\</form\>

Formatting Selection Menus and Selection Lists - <select> and <option>

- The <select> tag is used to create a drop-down list.

- The <option> tags inside the <select> element define the available options in the list.

- E.g:-

```
<select>
<option value="volvo">Volvo</option>
<option value="saab">Saab</option>
<option value="mercedes">Mercedes</option>
<option value="audi">Audi</option>
</select>
```

Attributes of <select> and <option> tag

<u>**<select>**</u> **tag attributes:**

- **name-** Defines a name for the drop-down list
- **size -** Defines the number of visible options in a drop-down list
- **multiple -** Specifies that multiple options can be selected at once
- **disabled -** Specifies that a drop-down list should be disabled

<u>**<option>**</u> **tag attributes:**

- **value** - Specifies the value to be sent to a server
- **selected** -Specifies that an option should be pre-selected when the page loads
- **label** -Specifies a shorter label for an option

```
<select>
<option>India</option>
<option>SriLanka</option>
<option>Pakistan</option>
</select>
```

```
<select  multiple="yes" size=3>
<option>India</option>
<option>SriLanka</option>
<option selected="yes">Pakistan
   </option>
<option>America</option>
<option>Africa</option>
</select>
```

Using Graphic Images for Submit Buttons

- If the browser's neutral-gray, rectangular Submit button isn't to your liking, you can substitute it for a graphic using a form control called an *image field*.

- *E.g:-*

  ```
  <form action="/cgi-bin/message.pl" method="post">
  E-mail Address:<br>
  <input type="text" name="email" size="20" />
  <br>
  <br>
  Message:<br>
  <textarea cols="50" rows="10" wrap="virtual" name="message">
  </textarea>
  <br>
  <input type="image" src="images/button.gif" width="25"
  height="25" name="submit_image" alt="Submit" >
  </form>
  ```

Using Hidden Fields

- It represents a hidden input field in an HTML form (this input field is invisible for the user).

- With this element you can send hidden form data to a server.

- For each <input type="hidden"> tag in an HTML form, a Hidden object is created.

- E.g:-

  <form action="http:// www.some-domain.com/cgi-bin/dental.pl" method="post">

  <input type="hidden" name="web_site" value="Alpha-Gizmo" >

  Select the Newsletters you wish to receive:

  <input type="checkbox" name="newsletter"value="oral_hygiene" > Oral Hygiene Weekly

  <input type="checkbox" name="newsletter"value="home_dentistry" /> Guide to Home Dentistry

  <input type="submit" name="Submit" value="Submit" />

  <input type="reset" name="reset" value="Reset" />

  </form>

Specifying the Focus Order of Form Controls

- On a page with several form controls, pressing Tab moves the cursor from the first form control to the last.

- By default, the page's *focus is the first form control* on the page.

- E.g:-

```
<form action="/cgi-bin/newsletters.pl" method="post">
User Name: <br>
<input type="text" name="user" size="20" tabindex="1" >
<br>
E-mail Address:<br>
<input type="text" name="email" size="20" tabindex="2"  accesskey= "e">
<br>
<input type="submit" name="Submit" value="Submit"
tabindex="3" />
<input type="reset" name="Submit2" value="Reset"
tabindex="4" />
</form>
```

Using Field Sets - <fieldset> tag

- It is used to group related elements in a form.
- It draws a box around the related elements.
- The <legend> tag defines a caption for the <fieldset> element.
- E.g:-

```
<form action="/cgi-bin/data.pl" method="post">
<fieldset>
<legend> Personal Information</legend>
<table>
<tr><td>Last Name:</td>
<td><input name="personal_lastname" type="text" tabindex="1" /></td>
</tr>
<tr><td>First Name:</td>
<td><input name="personal_firstname" type="text" tabindex="2" /></td>
</tr>
</table>
</fieldset>
</form>
```

This is my form

Email: [_____]

Password: [_____]

Confirm Password: [_____]

Upload Your Picture: [_____] [Browse_]

Gender: ○ Male ○ Female

Select Country: [United Kingdom ▼]

Hobby: ☐ Cricket ☐ Football

Address [_____]

[Submit]

Feedback Form

Please fill out this form to help us improve our site.

Name: [   ]

Comments:
[Enter comments here.   ]

E-mail Address: [   ]

Things you liked:
Site design ☐ Links ☐ Ease of use ☐ Images ☐ Source code ☐

How did you get to our site?:
Search engine ◉ Links from another site ◉ Deitel.com Web site ◉ Reference in a book ◉ Other ◉

Rate our site: [Amazing ▾]

Amazing
10
9
8
7
6
5
4
3
2
1
Awful

[Submit] [C...]

R.Vijayan/ AP(SG) / SITE / VIT University   12/19/2024

First Name: [   ]

Last Name: [   ]

E-Mail Address: [   ]

Phone Number: [   ]

Resident State: [NJ ▼]

Age Group:
- ◉ 0-20
- ○ 20-40
- ○ 41-60
- ○ Over 60

Membership:
☑ AAA ☐ Costco ☐ IEEE ☐ ACM

Comments:
[   ]

[Register] [Start Over]

Personal Information

Sex: ◯ Male ◯ Female

Birthday: [Month: ⬍] [Date: ⬍] [1975 ⬍]

State: [Ohio ⬍]

Country: [United States ⬍]

Site Registration

Username: [ ]

Password: [ ]

Retype password: [ ]

Email address: [ ]

Retype email address: [ ]

[Submit]