

CSC 213: Web Application Development

HTML PAGE LAYOUT DESIGN

Lecture 3

We shall cover the following:

- Create HTML forms
- Create HTML iFrames
- Create HTML layouts using tables and Div elements

HTML Forms

- A form on a web page allows a user to enter data that is sent to a server for processing. forms resemble paper or database forms because internet users fill out the forms using
- Checkboxes,
- Radio buttons, or
- Text fields.

HTML Forms

- In addition to functioning as input templates for new information, forms can also be used to query and display existing data in a similar manner to mail merge forms,
- The use of forms for this purpose avoids the problems associated with explicitly creating separate web pages for each record in a database.

HTML 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.
- The `<form>` tag is used to create an HTML form:

HTML Code

- *<form>*
- *input elements*
- *</form>*

The Input Element

- The most important form element is the input element.
- The input element is used to select user information.
- An input element can vary in many ways, depending on the type attribute.

The Input Element

- An input element can be of type
 - Text field,
 - Checkbox,
 - Password,
 - Radio button,
 - Submit button, and more.
- The most used input types are described below.

1. Text Fields

- `<input type="text" />` defines a one-line input field that a user can enter text into.

`<form>`

First name: `<input type="text" name="firstname" />``
`

Last name: `<input type="text" name="lastname" />`

`</form>`

How the HTML code above looks in a browser:

First name:

Last name:

- **Note:** The form itself is not visible.
- Also note that the default width of a text field is 20 characters.

2. Password Field

- `<input type="password" />` defines a password field:

`<form>`

Password: `<input type="password"
name="pwd" />`

`</form>`

How the HTML code above looks in a browser

Password:

Note: The characters in a password field are masked (shown as asterisks or circles).

3. Radio Buttons

- `<input type="radio" />` defines a radio button.
- Radio buttons let a user select **ONLY ONE** of a limited number of choices:

```
<input type="radio" name="sex" value="male"  
/> Male<br />
```

```
<input type="radio" name="sex" value="female"  
/> Female
```

```
</form>
```

How the HTML code above looks in a browser:



Male



Female

4. Checkboxes

- `<input type="checkbox" />` defines a checkbox.
- Checkboxes let a user select ONE or MORE options of a limited number of choices.

HTML Code

```
<form>
```

```
<input type="checkbox"
name="vehicle" value="Bike" /> I have
a bike<br />
```

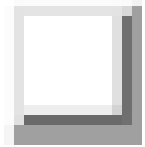
```
<input type="checkbox"
name="vehicle" value="Car" /> I have
a car
```

```
</form>
```


How the HTML code above looks in a browser:



I have a bike



I have a car

5. Submit Button

- `<input type="submit" />` defines a submit button.
- A submit button is used to send form data to a server.
- The data is sent to the page specified in the form's action attribute.
- The file defined in the action attribute usually does something with the received input:

```
<form name="input"  
action="html_form_action.asp"  
method="get">
```

```
Username: <input type="text" name="user"  
/>
```

```
<input type="submit" value="Submit" />  
</form>
```

How the HTML code above looks in a browser:

Username:

- If you type some characters in the text field above, and click the "Submit" button, the browser will send your input to a page called "html_form_action.asp".
- The page will show you the received input

HTML Iframes

- An iframe is used to display a web page within a web page.
- ***Syntax for adding an iframe:***
<iframe src="URL"></iframe>
- The URL points to the location of the separate page.

Iframe - Set Height and Width

- The height and width attributes are used to specify the height and width of the iframe.
- The attribute values are specified in pixels by default, but they can also be in percent (like "80%").

Iframe - Set Height and Width

- *Example:*

```
<iframe src="demo_iframe.htm"  
width="200" height="200"></iframe>
```

Iframe - Remove the Border

- The frameborder attribute specifies whether or not to display a border around the iframe.
- Set the attribute value to "0" to remove the border:

- Example

```
<iframe src="demo_iframe.htm"  
frameborder="0"></iframe>
```


Use iframe as a Target for a Link

- An iframe can be used as the target frame for a link.
- The target attribute of a link must refer to the name attribute of the iframe:

Use iframe as a Target for a Link

- *Example*

```
<iframe src="demo_iframe.htm"  
name="iframe_a"></iframe>
```

```
<p><a href="http://www.w3schools.com"  
target="iframe_a">W3Schools.com</a></p>  
>
```

HTML Layouts

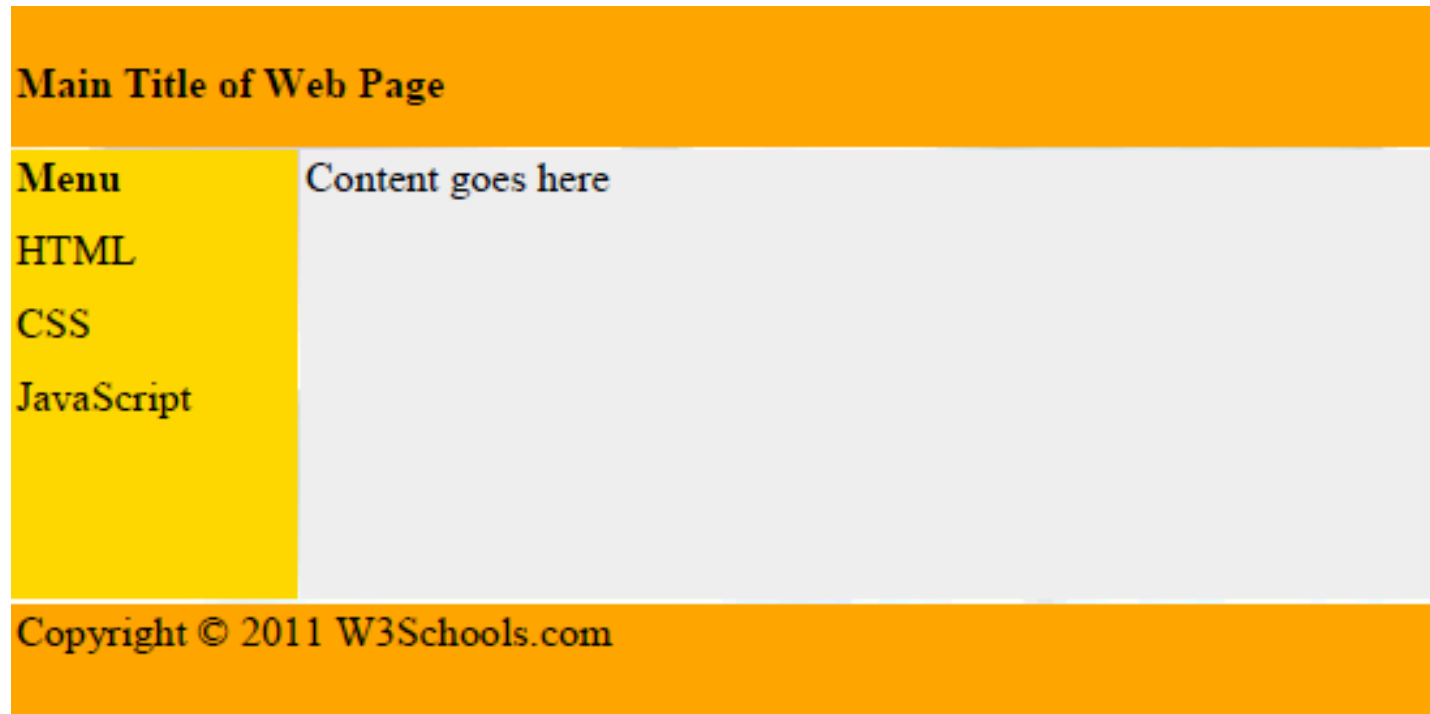
- Web page layout is very important to make your website look good.
- Design your webpage layout very carefully.
- Most websites have put their content in multiple columns (magazine or newspaper).
- Multiple columns is created by using `<table>` or `<div>` tags.
- Some CSS are normally also added to position elements, or to create backgrounds or colorful look for the pages.

1. HTML Layouts - Using Tables

- The simplest way of creating layouts is by using the HTML `<table>` tag.
- The following example uses a table with 3 rows and 2 columns - the first and last row spans both columns using the `colspan` attribute:

```
<html>
<body>
<table width="500" border="0">
<tr>
<td colspan="2" style="background-color:#FFA500;">
<h1>Main Title of Web Page</h1>
</td> </tr>
<tr valign="top">
<td style="background-color:#FFD700;width:100px;text-align:top;">
Content goes here</td>
</tr> <tr>
<td colspan="2" style="background-color:#FFA500;text-align:center;">Copyright © 2011 W3Schools.com</td>
</tr> </table> </body> </html>
```

The HTML code above will produce the following result:



- **Note:** Even though it is possible to create nice layouts with HTML tables, tables were designed for presenting tabular data - NOT as a layout tool

2. HTML Layouts - Using Div Elements

- The div element is a block level element used for grouping HTML elements.
- The following example uses five div elements to create a multiple column layout, creating the same result as in the previous example:

```
<html>
<body>
<div id="container" style="width:500px">
<div id="header" style="background-
color:#FFA500;">
<h1 style="margin-bottom:0;">Main Title of Web
Page</h1></div>
<div id="menu" style="background-
color:#FFD700;height:200px;width:100px;float:left;
">
<b>Menu</b><br />
HTML<br />
CSS<br />
JavaScript</div>
```



```
<div id="content" style="background-  
color:#EEEEEE;height:200px;width:400px;fl  
oat:left;">
```

Content goes here</div>

```
<div id="footer" style="background-  
color:#FFA500;clear:both;text-  
align:center;">
```

Copyright © 2011 W3Schools.com</div>

```
</div>
```

```
</body>
```

```
</html>
```

The HTML code above will produce the following result:

Main Title of Web Page

Menu

HTML

CSS

JavaScript

Content goes here

HTML Layout - Useful Tips

- The biggest advantage of using CSS is that, if you place the CSS code in an external style sheet, your site becomes MUCH EASIER to maintain.
- You can change the layout of all your pages by editing one file.
- Because advanced layouts take time to create, a quicker option is to use a template.