

Web Development using PHP and MySQL - Hypertext Markup Language (HTML)

Rahamathulla K
Assistant Professor
GEC Thrissur

January 17, 2017

Outline

- 1 Hypertext Markup Language
- 2 HTML Syntax
- 3 HTML Tags
- 4 Hypertext Links
- 5 Working with tables
- 6 HTML Frames
- 7 HTML Forms

Hypertext Markup Language

- Web pages are text files, written in a language called Hypertext Markup Language or HTML.
- A markup language is a language used to describe the content and format of documents
- HTML was developed from the Standard Generalized Markup Language (SGML), a language used for large-scale documents
- SGML proved to be cumbersome and difficult, thus HTML was created
- HTML allows Web authors to create documents that can be displayed across different operating systems
- HTML describes the format of Web pages through the use of tags

HTML Versions

- HTML 2.0 - November 24, 1995
- HTML 3.2 - January 14, 1997
- HTML 4.0 - December 18, 1997
- HTML5 - October 28, 2014

HTML Contd

- HTML has a set of rules, called syntax
 - syntax are a set of standards or specifications developed by a consortium of Web developers, programmers, and authors called the World Wide Web Consortium (W3C)
- HTML extensions have been added to support new features, which have been adopted in subsequent sets of standards released by the W3C
 - these extensions have provided Web page authors with more options

HTML Syntax

- Document content is what the users sees on the page, such as headings and images
- Tags are the HTML codes that control the appearance of the document content
 - **tag** is the name of the HTML tag
 - **attributes** are properties of the tag
 - **document content** is actual content that appears in the Web page

HTML Tags

- Tags can be one-sided or two-sided.
 - two-sided tags contain an opening tag `` that tells the browser to turn on a feature and apply it to the content that follows, and a closing tag `` that turns off the feature
 - one-sided tags are used to insert noncharacter data into the Web page, such as a graphic image or video clip
`<tag-attribute>`
- Tags are not case sensitive. The current standard is to display all tags in lowercase letters

HTML Tags

- My first HTML page

```
<html>
```

```
<head>
```

```
<title>My First HTML page </title>
```

```
</head>
```

```
<body>
```

```
</body>
```

```
</html>
```


HTML Tags

- `<html>` tag indicates that the file is written in HTML
- `<head>` tag contains information about the web page
- `<title>` tag contains the title of the web page
- Page content will go between `<body>` tags

Heading Tags

- HTML supports six levels of headings, numbered `<h1>` through `<h6>`, with `<h1>` being the largest and most prominent
- Headings are always displayed in a bold font
- eg. `<h1>`This is a sample h1 header `</h1>`

Paragraph Tags

- HTML formats text only through the use of tags and ignores such things as extra blank spaces, blank lines, or tabs
- To add space between paragraphs, use the paragraph tag `<p>`
- eg. `<p>This is a test paragraph </p>`

Inserting images

- Images can be displayed in two ways: as inline images or as external images
- an inline image displays directly on the Web page and is displayed when the page is accessed by a user
- an inline image can be placed on a separate line in your HTML code, or it can be placed directly within a line of text
- eg. `<p align='center'></p>`

Inserting Horizontal lines

- The HTML horizontal syntax includes the following
 - align specifies the horizontal alignment of the line on the page (center, left, or right)
 - size specifies the height of the line in pixels or percentage of the screen width
 - width indicates the width of the line in pixels or percentage of the screen width
 - width indicates the width of the line in pixels or percentage of the screen width
 - color indicates the color of the line
 - eg. `<hr align='center' width='1' color='blue'>`

Hypertext Links

- Hypertext documents contain **hypertext links**, items that you can select to view another topic or document, often called the **destination** of the link
- These links can point to
 - the same document
 - to a different document
 - to a different Web page
 - to a variety of other Web objects

Creating Anchors

- The `<a>` tag creates an anchor, text that is specially marked so that you can link to it from other points in a document
- Text that is anchored is the destination of a link
- Each anchor has its own anchor name, using the 'name' attribute i.e. `Testing `.
- An anchor doesn't have to be text. You can mark an inline image as an anchor.
- Adding an anchor does not change your document's appearance in any way. It merely creates locations in your Web page that become destinations of links.

Creating Links

- To create a link to an anchor, use the same `<a >` tag you used to create the anchor
- The `<a>` tags used to create links are sometimes called link tags.
- Use the **href** attribute, which is short for Hypertext Reference, to indicate the location to jump to.
- **href** can refer to an anchor that you place in the document or to a different Web page or a resource anywhere on the Internet
- You link to an anchor using the anchor name preceded by a pound (`#`) symbol i.e. `Test `.

Linking to a Document

- To create a link to a document, use the same `<a>` tag with the href attribute i.e. `Click here to test `.
- In order for the browser to be able to locate and open `linktest.html`, it must be in the same folder as the document containing the link.
- To navigate to a specific location elsewhere in a document, rather than the top, you can set anchors and link to an anchor you create within the document

Linking to a Document

- Link to Another Page on the Web
- Displaying Linked Documents in a New Window
 - By default, each Web page you open is displayed in the main browser window, replacing the one you were viewing last
 - To force a document to appear in a new window, instead of the main browser window, you would use the target attribute in the href tag
i.e. `GEC Thrissur `

Linking to a Document

- External Hyperlinks
- Linking to File Transfer Protocol (FTP) Servers
- Displaying a FTP Site
- Linking to E-mail
- `Send mail to abc `

Working with tables

- `<table >` tag for defining the table
- `<th >` for defining the table headers
- `<caption >` tag
- `<tr >` tag
- `<td >` tag

HTML Frames

- HTML frames are used to divide your browser window into multiple sections where each section can load a separate HTML document
- A collection of frames in the browser window is known as a frameset
- To use frames on a page we use `<frameset >` tag instead of `<body>` tag
- Horizontal frames and Vertical frames
- eg. `<frameset rows='20%,80%' >`

HTML Forms

- The form is enclosed in form tags
- `<form action=path/to/submit/page method=get>`
 `<- form contents ->`
 `</form>`

Form tags

- `action=".."` is the page that the form should submit its data to
- `method=".."` is the method by which the form data is submitted. The options are either `get` or `post`. If the method is `get` the data is passed in the url string, if the method is `post` it is passed as a separate file.

Form fields: text input

- Use a text input within form tags for a single line freeform text input.
- `<label for=fn" >First Name </label >`
`<input type="text"`
`name="firstname"`
`id=fn"`
`size="20" />`
- `name=".."` is the name of the field. You will use this name in PHP to access the data.
- `id=".."` is label reference string this should be the same as that referenced in the `¡label¡` tag.
- `size=".."` is the length of the displayed text box (number of characters).

Form fields: password input

- Use a starred text input for passwords.
- `<label for=pw" >Password </label >`
`<input type="password"`
`name="password"`
`id=pw"`
`size="20" />`

Form fields: drop down

- `<label for="tn" >Where do you live </label >`
`<select name="town" id="tn" >`
`<option value="swindon" >Swindon </option >`
`<option value="london selected="selected" >London`
`</option >`
`<option value="bristol" >Bristol </option >`
`</select >`

Form fields: radio buttons

- ```
<input type="radio"
name="age"
id="u30"
checked=checked value="Under30" />
<label for="u30">Under 30 </label>

<input type="radio"
name="age"
id="thirty40"
value="30to40" />
<label for="thirty40">30 to 40 </label>
```

# Submit button

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

# Quiz

- What is the correct HTML element for inserting a line break
  - ❶ `<break >`
  - ❷ `<br >`
  - ❸ `<hr >`
  - ❹ `<linebreak >`

# Quiz

- What is the correct HTML for inserting an image?
  - ❶ `<img alt=" MyImage" >image.gif</img >`
  - ❷ ``
  - ❸ `<image src=" image.gif" alt=" MyImage" >`
  - ❹ `<img href=" image.gif" alt=" MyImage" >`