

INTRODUCTION TO HTML

Outlines:

- **What is HTML**
- **Purpose of HTML Language**
- **Structure of HTML Document**
- **HTML Editors**
- **HTML Tags**
- **Attributes**
- **HTML Comments**

Objectives:

- **Understand the HTML Language**
- **Create a simple web page**
- **Understand the components of web page**

WHAT IS HTML

- HTML stands for **Hyper Text Markup Language**
- HTML is a language for creating web pages.
- HTML is not a programming language.
- it is a **markup language**
- A markup language is a set of **markup tags**
- The markup tags describe how text should be **displayed**

Purpose of HTML

Purpose of HTML Language is to create static web sites.

Structure of HTML Document

1. Header section

- `<head></head>`
- Contains info about web page

2. Body section

- `<body></body>`
- Contains main content of web page

3. Footer section

- `<footer></footer>`
- Contains footer content of web page

HTML Page Structure

- That's all you need for a basic web page!

```
<!DOCTYPE HTML PUBLIC
  "-//W3C//DTD HTML 4.01//EN"
  "http://www.w3.org/TR/html4/strict.dtd">
<html>
  <head>
    <title>My Title</title>
  </head>
  <body>
    <p>This is my first web page.</p>
  </body>
</html>
```

```
<footer>
```

```
<p>This is footer section of page.</p>
```

```
</footer>
```

```
</html>
```

HTML Text Editor

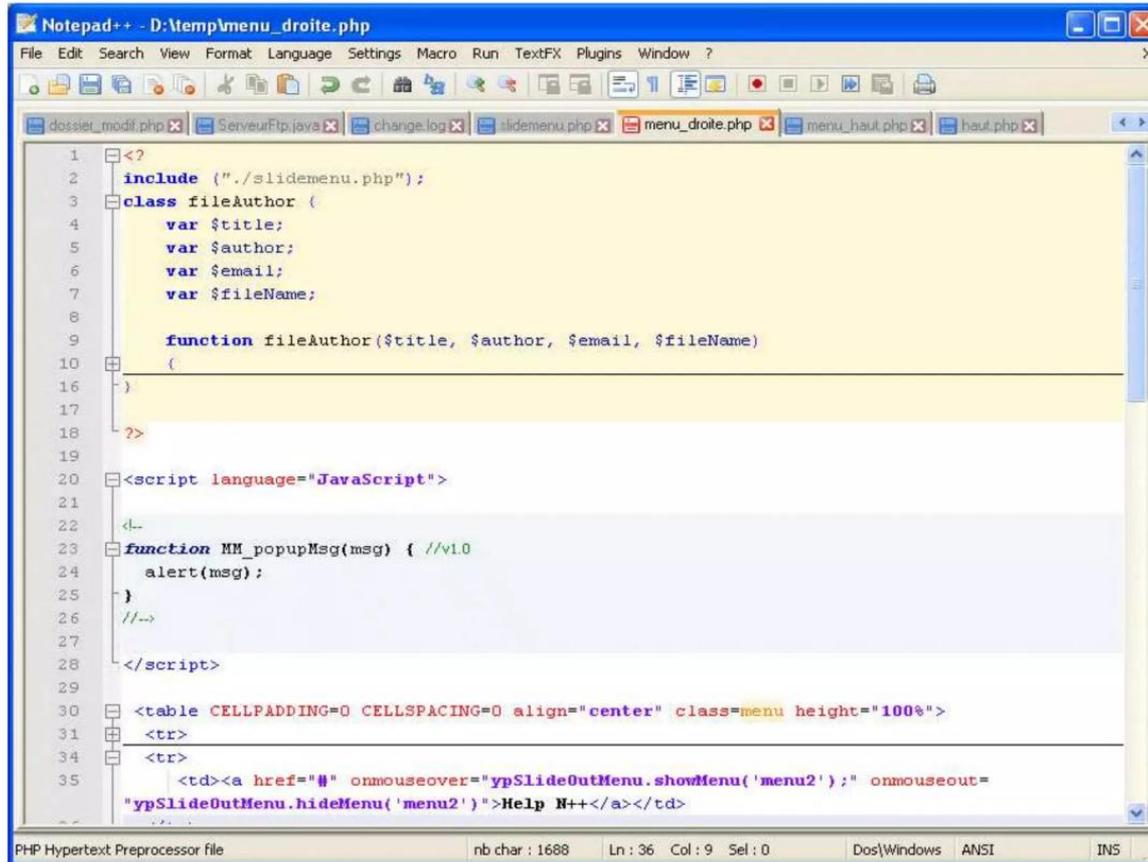
HTML text editor is used to write HTML code and save that HTML file.

There are different editors are available to write HTML code

Recommended Text Editors (Windows)

- Notepad
- Notepad++
- Macromedia Dream Weave
- GNU Emacs
- Crimson Editor
- ConTEXT
- SciTE
- Komodo Edit
- jEdit

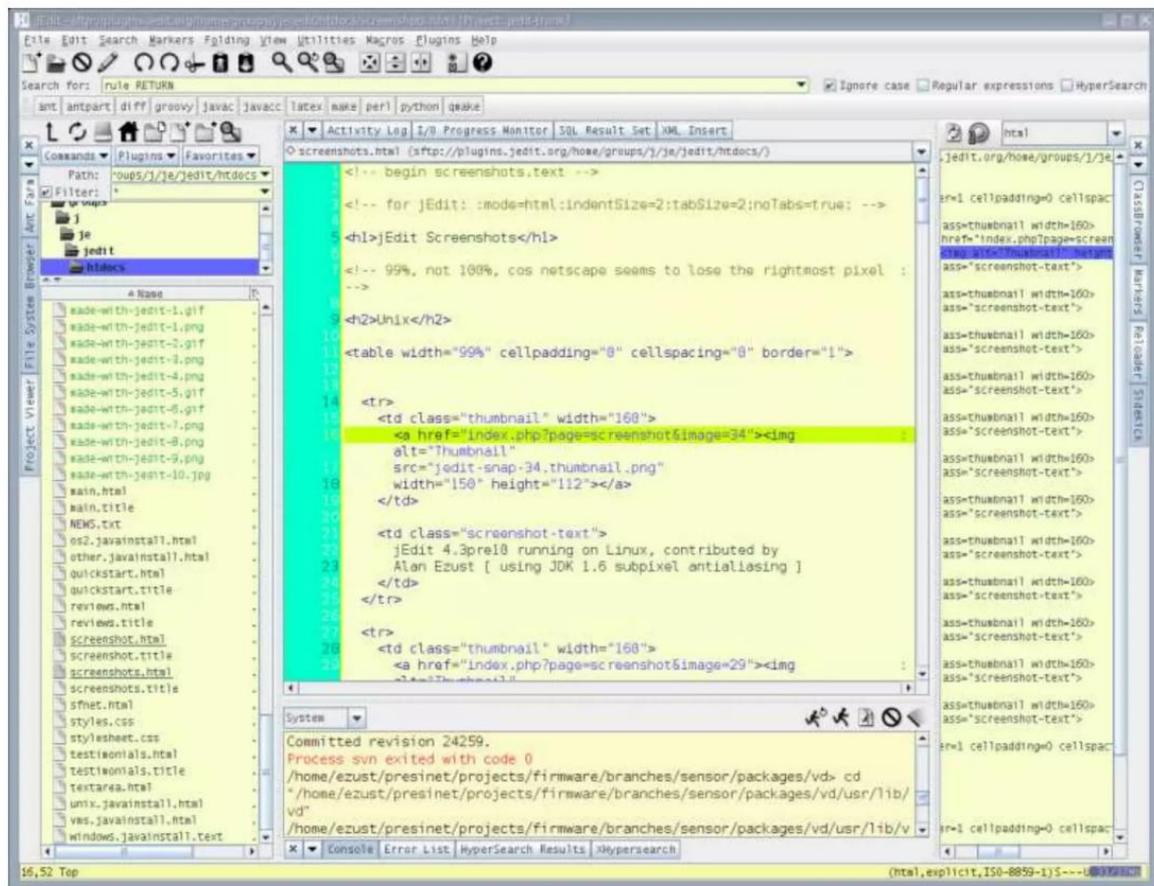
Notepad++ Editor



The image shows a Notepad++ window titled "Notepad++ - D:\temp\menu_droite.php". The window contains PHP code for a menu system. The code includes a class definition for fileAuthor, a JavaScript function for MM_popupMsg, and an HTML table structure for a menu. The status bar at the bottom indicates "PHP Hypertext Preprocessor file", "nb char : 1688", "Ln : 36", "Col : 9", "Sel : 0", "Dos\Windows", "ANSI", and "INS".

```
1 <?
2 include ("./slidemenu.php");
3 class fileAuthor (
4     var $title;
5     var $author;
6     var $email;
7     var $fileName;
8
9     function fileAuthor($title, $author, $email, $fileName)
10    {
11
12    }
13
14
15
16
17
18 ?>
19
20 <script language="JavaScript">
21
22 <!--
23 function MM_popupMsg(msg) { //v1.0
24     alert(msg);
25 }
26 //-->
27
28 </script>
29
30 <table CELLPADDING=0 CELLSPACING=0 align="center" class="menu" height="100%">
31 <tr>
32
33 <tr>
34
35 <td><a href="#" onmouseover="ypSlideOutMenu.showMenu('menu2');" onmouseout="
36 ypSlideOutMenu.hideMenu('menu2');">Help N++</a></td>
```

jEdit Editor



HTML Tags

- HTML is comprised of “elements” and “tags”
- HTML tags are keywords surrounded by angle brackets like `<html>`
- HTML tags normally come in pairs like `<p>` and `</p>`
- Tags are nested one inside another:
Example: `<body> <p> </p> <h1> </h1> </body>`
- The first tag in a pair is the start tag, the second tag is the end tag

Note: The start and end tags are also called the opening and closing tags.

First HTML Page: Tags

```
<!DOCTYPE HTML PUBLIC
  "-//W3C//DTD HTML 4.01//EN"
  "http://www.w3.org/TR/html4/strict.dtd">
<html>
<head>
  <title>My First HTML Page</title>
</head>
<body>
  <p>This is some text...</p>
</body>
</html>
```

Opening tag

Closing tag

HTML – Required Tags

■ HTML Tag:

■ `<html> ... </html>` (Required!)

- ◆ Basic tag to identify portion of file that contains HTML
- ◆ `<html>` is an opening tag
- ◆ `</html>` is a closing tag (note the direction of the slash!)
- ◆ text between the opening and closing tag is called the “element”

■ Head Tag:

■ `<head> ... </head>` (Required!)

- ◆ placed at the top of document immediately after the `<html>` tag
- ◆ tags information about the document, e.g. author, style, etc.
- ◆ contains the required document `<title>...</title>` tag

HTML – Required Tags

- **Meta Tag:**
- **<meta>**
 - is used to specify keywords that describe a document's contents as well as a short description.
- **Two necessary attributes – "name" & "content"**
 - <meta name="keywords" content="baseball, soccer, tennis"/>**
 - <meta name="description" content="Sports information page"/>**

HTML – Required Tags

■ Title Tag:

■ `<title> ... </title>` (Required!)

- ◆ included as an element inside the `<head>...</head>` section
- ◆ element of this tag is the title displayed in title bar of the browser
- ◆ may also be used as title of page when page is bookmarked
- ◆ should be meaningful and uniquely identify the page

■ Body Tag:

■ `<body> ... </body>` (Required!)

- ◆ included as the second element inside the `<html>...</html>` tags.
- ◆ follows the `<head>...</head>` portion of the document
- ◆ contains the information to be displayed in the browser window
- ◆ any attributes set on this tag will apply to the entire page

HTML – Required Tags

- **Paragraph tag:**
- `<p> ... </p>` (Required!)
 - ♦ included as an element inside the `<body>...</body>` section
 - ♦ Surrounds a paragraph of text
- **Document Type Tag:**
- DOCTYPE (Required!)
 - ♦ Must be the very first line of your file, before `<html>`
 - ♦ NOT an HTML tag; it is an instruction to your web browser
 - ♦ Tells the browser what version of HTML to expect
 - ♦ In this course we use only the “strict” HTML version 4.01 type:

```
<!DOCTYPE HTML PUBLIC
  "-//W3C//DTD HTML 4.01//EN"
  "http://www.w3.org/TR/html4/strict.dtd">
```

HTML - Basic Tags

- More useful basic tags:

- **Line Break tag:**

- `
` (no closing tag needed)
 - put a line break in the text (starts a new line)
 - `<p>this is paragraph</p>
`
 - `<p>this is paragraph</p>`

- **Heading Tag:**

- `<h1> ... </h1>` through `<h6> ... </h6>`
 - used to identify text as a Level 1 (major) to Level 6 (minor) heading

- Code:

`<h1>This is first heading</h1>`

`<h2>This is first heading</h2>`

`<h3>This is first heading</h3>`

`<h4>This is first heading</h4>`

`<h5>This is first heading</h5>`

`<h6>This is first heading</h6>`

Output:

This is first heading

HTML - Basic Tags

- The Anchor Tag OR Hyper Linking Tag

- `<a> ... `

- ♦ one major attribute – the location of the hyperlink:
 - `href="string"`
- ♦ element is clickable/selectable as a document hyperlink
- ♦ browser attempts to load the page specified by the `href=` attribute
- ♦ the `href= string` can be a relative URL on the same server:
 - without the leading `http://host/` it is in the same directory structure:
 - e.g. `Click here to continue`
 - e.g. `See the box here.`
 - e.g. `Click here`

HTML - Basic Tags

■ Anchor Tag:

`<a>...` anchor tag continued

- ♦ The `href= string` can be an absolute URL on any server:
 - string can be any HTTP URL (web address) you like:
 - e.g. `Free Software`
 - E.g. `Google`
- ♦ The `href= string` can be an email address:
 - string can be an email address preceded by "mailto:"
 - e.g. `Ian! D. Allen email`
 - Attempts to open an email client (specified in the web browser's options) and places the specified email address in the To: field of a new email message.

Anchor Tag Syntax

```
<html>
```

```
<head>
```

```
<title>Anchor Tag</title>
```

```
</head>
```

```
<body>
```

```
<a href="iba-suk.edu.pk" target="_blank">IBA  
Sukkur</a>
```

```
</body>
```

```
</html>
```

HTML - Basic Tags

■ Image Tag:

■ `` (no closing tag needed)

- ♦ used to display graphics (.jpeg, .png, .gif) in your web pages
- ♦ you must specify the URL for the image source, and an alt= text
- ♦ the basic attributes of `` are:
 - `src="string"` - the absolute or relative location of the image file
 - `alt="string"` - Alternate Text for people who don't see images
 - `height="string"` - image height, percent or absolute pixels (optional)
 - `width="string"` - image width, percent or absolute pixels (optional)
 - `title="string"` - mouse-over title of the image (optional)
- E.g. ``

Syntax

```

```



HTML - Basic Tags

- **Horizontal Line Tag:**
- `<hr>` (no closing tag needed)
 - Hard/Horizontal Rule – draw a horizontal line
 - rule appearance can be changed with styles
- **Quotation Tag:**
`<blockquote> ... </blockquote>`
 - block quotation, indented
- **PRE Tag:**
- `<pre> ... </pre>`
 - preformatted text (e.g. computer code or output)
 - fixed-width font (e.g. Courier fixed width)
 - preserves spaces and line breaks

ATTRIBUTES

An attribute is a special code that can enhance or modify a tag. They are generally located in the starting tag after the tag name.

Syntax:

`<p style="color: red; font-size: 18px">This is a paragraph </p>`

Attribute Name

Attribute Value

HTML COMMENTS

Comment Tag:

- `<!-- comments here -->`

Comments are enclosed in `<!--` and `-->`

Example

```
<!--This comment will not be displayed-->
```

```
<p>This is a regular paragraph</p>
```

Code L Program

```
<!DOCTYPE HTML PUBLIC  
  "-//W3C//DTD HTML 4.01 Transitional//EN" "http://www.w3.org/TR/html4/loose.dtd"> <html>  
<html>  
<head>  
<meta name="keyword" content="Football, soccer, tennis"/>  
<title>  
</title>  
<body>  
<p>  
<p>This is a paragraph  
  
<h1>This is heading</h1>  
</body>  
</html>
```

Describe HTML Version

Describe HTML Page Type to the browser

Define keywords

Define info about web page

Define Title of Web Page

Starts the body section of page

Define P

Define Attribute Name

Define Comment

Define Image

Define Heading