

HTML, CSS , Javascript

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25th April

Topics

1 HTML

2 JavaScript

HTML

Hypertext Markup Language

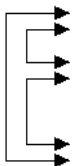
HTML is a markup language for describing web documents (web pages).

- HTML stands for Hyper Text Markup Language.
- A markup language is a set of markup tags.
- HTML documents are described by HTML tags.
- Each HTML tag describes different document content.

HTML Tags

HTML tags are keywords (tag names) surrounded by angle brackets `<tagname>content</tagname>`

- HTML tags normally come in pairs like `<p>` and `</p>`
- The first tag in a pair is the start tag, the second tag is the end tag
- The end tag is written like the start tag, but with a slash before the tag name



```
<HTML>  
<HEAD>  
<TITLE>this is the title the window will show</TITLE>  
</HEAD>  
<BODY>  
    all the interesting stuff is here  
</BODY>  
</HTML>
```

Page structure

HTML page structure

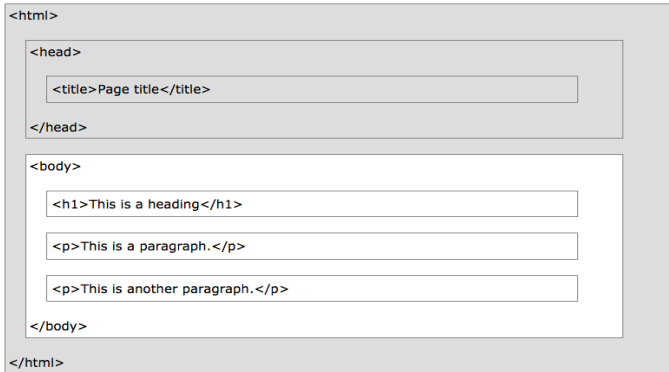


Figure: HTML page structure

!DOCTYPE

- The `<!DOCTYPE>` declaration helps the browser to display a web page correctly.
- There are different document types on the web.
- To display a document correctly, the browser must know both type and version. The doctype declaration is not case sensitive. All cases are acceptable.
- `<!DOCTYPE html>`

HTML Editors

HTML can be edited by using professional HTML editors like

- Microsoft WebMatrix, Sublime Text, Notepad, Text edit, Any editor you know.
- Online editors.
- Open it, write basic HTML tags, save it as index.html extension.

HTML Basics

Most used tags

- **DOCTYPE** `<!DOCTYPE html>`
- **html tag** `<html>.... </html>`
- **Headings** `<h1>.... </h1>`
- **Paragraphs** `<p>.... </p>`
- **Links** `This is a link`
- **Images** ``

HTML Basics

HTML elements

- **Open/Close elements:** `<tagname>content... </tagname>`
- **Empty elements:** `
` break line
- **Nested Elements:** content between tags become other html tags.
- Do not forget the end tags (sometimes work (p))

HTML Attributes

Introduction

- HTML elements can have attributes
- Attributes provide additional information about an element
- Attributes are always specified in the start tag
- Attributes come in name/value pairs like: `name="value"`

HTML Attributes

Attribute examples

- **Title** attribute: `<p title="About W3Schools" >`
- **href** attribute: `<a href="http://www.w3schools.com" <`
- **Size** attribute: `element

- This element contains **meta data** Meta data are not displayed.
- It is placed between the <html>tag and the <body>tag:
- **meta tags:** Does not change your page look, but provide additional information about your page. but purely for search engine's use
 - <title>Effects the browser tab.
 - <meta>It can be used to define the character set, and other information about the HTML document.
- <title>My First HTML</title>
- <meta charset=" UTF-8" >

HTML styles

HTML displays

- Screen size, resize window effects pages.
- Browser removes extra spaces.
- Any number of spaces, and any number of new lines, count as only one space.
- Poem problem. solved by `<pre>`

HTML styles

style attribute

- Syntax: `style="property:value;"` (CSS property and value)
- **Color:** `<h2 style="color:red;" <I am red </h2>`
- **background:** `<body style="background-color:lightgrey;" >`
- **Font:** `<h1 style="font-family:verdana;" >This is a heading</h1>`
- **Text size:** `<h1 style="font-size:300%;" >This is a heading</h1>`
- **Text Alignment:** `<h1 style="text-align:center;" >Centered Heading</h1>`

CSS

Cascading Style Sheets

CSS is a stylesheet language that describes the presentation of an HTML (or XML) document. CSS describes how elements must be rendered on screen, on paper, or in other media.

- Inline - using a style attribute in HTML elements
- Internal - using a `<style>` element in the HTML `<head>` section
- External - using one or more external CSS files

CSS

Intline Styling

Inline styling uses the style attribute.

```
<h1 style="font-family:verdana;" >This is a heading</h1>
```

CSS

Internal Styling

Internal styling is used to define a style for one HTML page.

```
<!DOCTYPE html>
<html>
<head>
<style>
body {background-color:lightgrey;}
h1   {color:blue;}
p    {color:green;}
</style>
</head>
<body>

<h1>This is a heading</h1>
<p>This is a paragraph.</p>

</body>
</html>
```

Figure: Internal styling example

CSS

External Styling

An external style sheet is used to define the style for many pages. With an external style sheet, you can change the look of an entire web site by changing one file! To use an external style sheet, add a link to it in the `<head>` section of the HTML page:

```
<!DOCTYPE html>
<html>
<head>
  <link rel="stylesheet" href="styles.css">
</head>
<body>

<h1>This is a heading</h1>
<p>This is a paragraph.</p>

</body>
</html>
```

Figure: External styling example

CSS

examples

- General css style
- specific css style: define id attribute for the html element `<p id="p01">I am different</p>`
- In CSS side

```
#p01 {  
  color: blue;  
}
```

HTML remainings

- Images
- Tables
- Lists
- Blocks
- Layouts
- classes
- iFrames

JavaScript

- JavaScript is the programming language of HTML and the Web.
- HTML to define the content of web pages
- CSS to specify the layout of web pages
- JavaScript to program the behavior of web pages.

JavaScript

Basics

- `<script>` tag is used to define a script (JavaScript).
- `<noscript >` If browser does not support or disabled,
- `document.getElementById("demo").innerHTML = "Hello JavaScript!"`;

Thank You

Relevant links I



HTML Tutorial

<http://www.w3schools.com/html/default.asp>



CSS Tutorial

<http://www.w3schools.com/css/default.asp>



Javascript

<http://www.w3schools.com/js/default.asp>