

Course: PHP from scratch

by Sergey Podgornyy

Introduction to
HTML & CSS



About me



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and

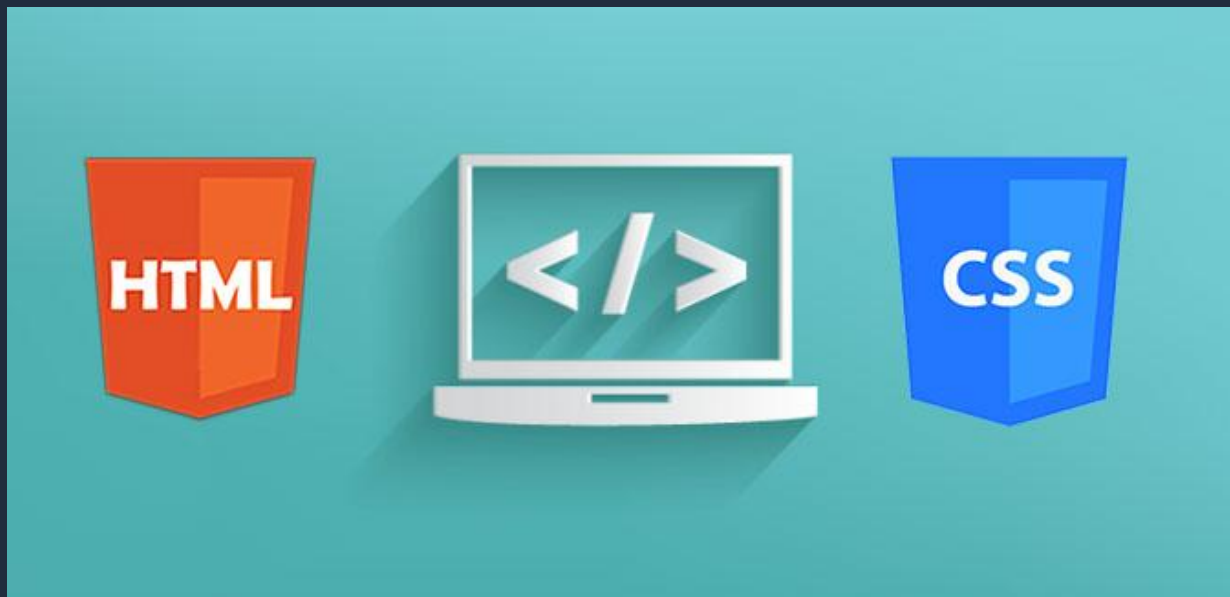


Overview

- Goals and objectives of HTML
- Document Structure (DOM)
- meta data – keywords, description, robots
- Comments
- Markup, elements, tags, attributes
- Header h1-h6
- Paragraph p. Text formatting – strong, em, ins, cite, big, small, sub, sup
- Entities - © ™
- Hyperlinks – relative and absolute
- Images
- Lists – ol, ul, dl. Navbar based on list
- iframes
- Semantic markdown i u em, b u strong, div u nav, aside, header, footer
- Tables. colspan & rowspan
- Forms. Required attribute. input type=text, password, submit; value, placeholder; checkbox, radio; select;
- CSS selectors. borders, margins, paddings.
- Sizes, positions, visibility

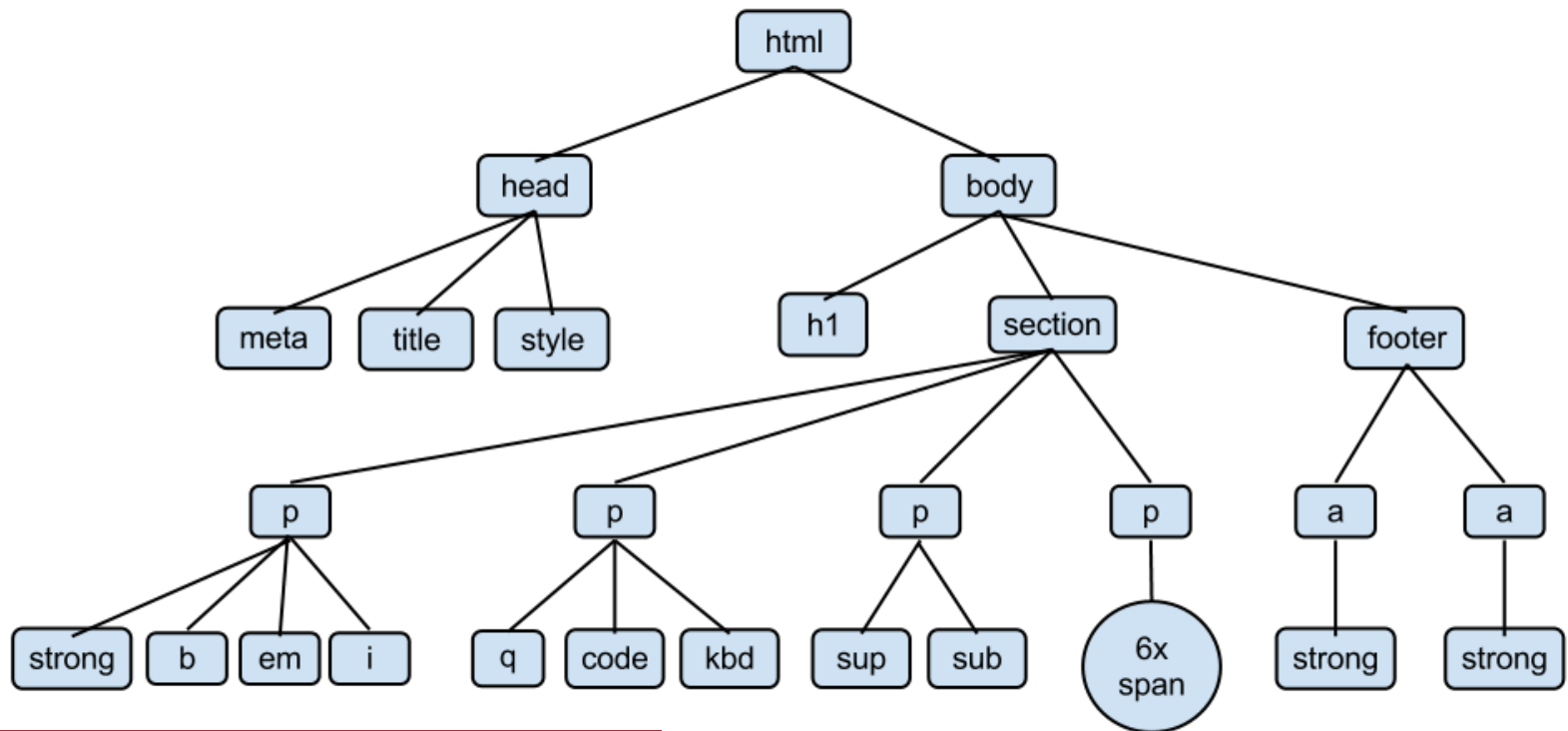
HTML

Hyper Text Markup Language (HTML) is the standard markup language for creating web pages and web applications



DOM

The **Document Object Model (DOM)** is a cross-platform and language-independent application programming interface



DOM

```
1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4      <meta charset="UTF-8">
5      <title>Document</title>
6      <style type="text/css">
7          div {
8              background: #ccc;
9              color: #333;
10             width: 600px;
11             margin: 10px auto;
12         }
13         h1 {
14             text-align: center;
15         }
16     </style>
17 </head>
18 <body>
19     <div>
20         <h1>Hello world</h1>
21         <p>This paragraph will be separated on<br>two lines</p>
22         <!-- This is comment which will be not displayed on a page -->
23     </div>
24 </body>
25 </html>
26
```

Metadata

Metadata is used by browsers, by search engines, and other web services

- Define the character set used:

```
<meta charset="UTF-8">
```

- Define a description of your web page:

```
<meta name="description" content="Free Web tutorials">
```

- Define keywords for search engines:

```
<meta name="keywords" content="HTML, CSS, XML, JavaScript">
```

- Define the author of a page:

```
<meta name="author" content="Hege Refsnes">
```

- Refresh document every 30 seconds:

```
<meta http-equiv="refresh" content="30">
```

Formatting Elements

Formatting elements were designed to display special types of text:

- `` - Bold text
- `` - Important text
- `<i>` - Italic text
- `` - Emphasized text
- `<mark>` - Marked text
- `<small>` - Small text
- `` - Deleted text
- `<ins>` - Inserted text
- `<sub>` - Subscript text
- `<sup>` - Superscript text



HTML Entities

Character entities are used to display reserved characters in HTML. A character entity looks like this:

```
&entity_name;  
OR  
&#entity_number;
```

- **Advantage of using an entity name:** An entity name is easy to remember.
- **Disadvantage of using an entity name:** Browsers may not support all entity names, but the support for numbers is good.

Some Useful HTML Character Entities

Result	Description	Entity Name	Entity Number
	non-breaking space	 	
<	less than	<	<
>	greater than	>	>
&	ampersand	&	&
"	double quotation mark	"	"
'	single quotation mark (apostrophe)	'	'
¢	cent	¢	¢
£	pound	£	£
¥	yen	¥	¥
€	euro	€	€
©	copyright	©	©
®	registered trademark	®	®



HTML Links - Hyperlinks

- Use the **<a>** element to define a link
- Use the **href** attribute to define the link address
- Use the **target** attribute to define where to open the linked document
- Use the **** element (inside **<a>**) to use an image as a link
- Use the **id** attribute (**id="value"**) to define bookmarks in a page
- Use the **href** attribute (**href="#value"**) to link to the bookmark

HTML Links

By default, a link will appear like this (in all browsers):

- An unvisited link is underlined and blue
- A visited link is underlined and purple
- An active link is underlined and red

You can change the default colors, by using styles:

```
<style>
a:link      {color:green; background-color:transparent; text-decoration:none}
a:visited   {color:pink; background-color:transparent; text-decoration:none}
a:hover     {color:red; background-color:transparent; text-decoration:underline}
a:active    {color:yellow; background-color:transparent; text-decoration:underline}
</style>
```

The target attribute can have one of the following values:

- `_blank` - Opens the linked document in a new window or tab
- `_self` - Opens the linked document in the same window/tab as it was clicked (this is default)
- `_parent` - Opens the linked document in the parent frame
- `_top` - Opens the linked document in the full body of the window
- `framename` - Opens the linked document in a named frame



HTML List

Unordered HTML List

```
<ul style="list-style-type:disc">  
  <li>Coffee</li>  
  <li>Tea</li>  
  <li>Milk</li>  
</ul>
```

The CSS **list-style-type** property is used to define the style of the list item marker:

disc - Sets the list item marker to a bullet (default)

circle - Sets the list item marker to a circle

square - Sets the list item marker to a square

none - The list items will not be marked

Ordered HTML List

```
<ol type="1">  
  <li>Coffee</li>  
  <li>Tea</li>  
  <li>Milk</li>  
</ol>
```

The **type** attribute of the tag, defines the type of the list item marker:

type="1" - The list items will be numbered with numbers (default)

type="A" - The list items will be numbered with uppercase letters

type="a" - The list items will be numbered with lowercase letters

type="I" - The list items will be numbered with uppercase roman numbers

type="i" - The list items will be numbered with lowercase roman numbers



Tables

- An HTML table is defined with the **<table>** tag.
- Each table row is defined with the **<tr>** tag. A table header is defined with the **<th>** tag. By default, table headings are bold and centered. A table data/cell is defined with the **<td>** tag.



iframe

An `iframe` is used to display a web page within a web page

```
<iframe src="URL" height="200" width="300"></iframe>
```



Forms

```
<form action="action_page.php" method="post" oninput="x.value=parseInt(a.value)+parseInt(b.value)">
  <fieldset>
    <legend>Personal information:</legend>
    First name:<br>
    <input type="text" name="firstname" value="Mickey"><br>
    User password:<br>
    <input type="password" name="psw"><br><br>
    <textarea name="message" rows="10" cols="30">
      The cat was playing in the garden.
    </textarea><br>

    <input type="radio" name="gender" id="male" value="male" checked> <label for="male">Male</label><br>
    <input type="radio" name="gender" id="female" value="female"> <label for="female">Female</label><br>
    <input type="checkbox" name="gender" id="coffeee" value="coffeee" checked> <label for="coffeee">Coffee</label><br>
    <input type="checkbox" name="gender" id="tee" value="tee"> <label for="tee">Tee</label><br>

    <select name="cars">
      <option value="volvo" selected>Volvo</option>
      <option value="saab">Saab</option>
    </select><br>

    <input list="browsers">
    <datalist id="browsers">
      <option value="Firefox">
      <option value="Chrome">
    </datalist>
    <br>

    <br>
    <button type="button" onclick="alert('Hello World!')">Click Me!</button>
    <input type="submit" value="Submit">
  </fieldset>
</form>
```


CSS

- CSS is a language that describes the style of an HTML document.
- CSS describes how HTML elements should be displayed.
- This tutorial will teach you CSS from basic to advanced.



Useful resources

- <http://www.w3schools.com/html/>
- <http://www.w3schools.com/css/>
- [Bootstrap tutorials](#)

Thanks for your attention

Q & A

