



Amirkabir University of Technology
(Tehran Polytechnic)

Database Systems Fundamentals

Using PHP Language

Arman Malekzade

Amirkabir University of Technology
(Tehran Polytechnic)

Notice: The class is held under the supervision of Dr.Shiri



github.com/arman-malekzade

arman.malekzade@aut.ac.ir





Chapter 3- HTML & PHP

Roadmap :

- Hypertext Markup Language
 - I. AN OVERVIEW OF HTML
 - II. DOCUMENT-OBJECT MODEL
 - III. MOST USED TAGS
 - IV. CSS & Twitter Bootstrap
- Hypertext Preprocessor



Hypertext Markup Language

- Hypertext is text which contains links to other texts.
- Markup languages are designed for the processing, definition and presentation of text.
- HTML is not a programming language. (i.e. it doesn't have variables)
- Can simulate the behavior of a programming language with the help of other programming languages.
- Usually embedded in PHP, ASP, ...
- It can include Javascript code





HTML Tags

- General form: `<tagname att1="val1" ... att10="val10">`
- Each object is represented by one (or two) tag(s).
- Each tag may be included in another one. If so, We call it a child.
- Some of the objects contain content:

`<p>a paragraph</p>`

- Two tags correspond to those objects: Opening, Closing Tag





Document-Object Model (DOM)

- A Web page (document) consists of many objects
- Each html document has three main tags: HTML, HEAD, BODY
- The first one contains content of a web page
- The second one contains metadata (data about data)
- The latter one contains everything that a user should see





HTML Tags: Head Section

- Title: The title of a webpage

Ex: `<title>Facebook</title>`

- Meta (Description)

Ex: `<meta name="description" content="160 characters">`



- Link: defines a link between a document and an external resource.



Ex: `<link rel="stylesheet" type="text/css" href="style.css">`

Ex: `<link href="myfont.woff" rel="stylesheet" type="text/css">`





HTML Tags: Head Section

- Title: The title of a webpage (Should be close to H1 tags) 
Ex: `<title>Facebook</title>` Try to find a unique one
- Meta (Description) 
Ex: `<meta name="description" content="160 characters">`
- Link: defines a link between a document and an external resource.
Ex: `<link rel="stylesheet" type="text/css" href="style.css">`
Ex: `<link href="myfont.woff" rel="stylesheet" type="text/css">`





HTML Tags: Head Section

- Favicon

Ex: `<link rel="icon" type="image/png" href="../../img/favicon.png" />`

Ex: `<link rel="icon" href="favicon.ico" type="image/x-icon" />`

- Script: Used to include Javascript (like bootstrap)

Ex: `<script type="text/javascript" src="main.js"></script>`





HTML Tags: Body Section

- P (paragraph)



Ex: `<p>The content</p>`

- BR (break)

Ex: First line of text.`
`Second line of text

- SEO Example:

`<p>Jane: Hello
Scott: Hi</p>`

Search engine: Jane: HelloScott Hi  





HTML Tags: Body Section

- Unordered/Ordered List

Ex: `` OR ``

`first item`

`second item`

`` OR ``

Saturn Facts

- One Orbit of Sun is 10,759.2 Days List item to list item
- Rotation Period is 10 Hours, 13 Min - longer distance
- Mass is 95 times that of Earth
- Volume is 744 times that of Earth
- Distance from Sun is 1,429 million kilometers

Title to list item - shorter distance

FIG. 1

U.S. Patent May 11, 2010 Sheet 1 of 11 US 7,716,216 B1





HTML Tags: Forms

- Form: used to pass data from one page to another

Ex: `<form action="target_page.php" method="get"></form>`

- Input

Ex: `<input type="text" name="address" value="ValiAsr St.">`

Ex: `<input type="email" name="usermail" value="x@y.com">`

Ex: `<input type="number" name="age" value="20">`

Ex: `<input type="submit" name="Send">`
`reset Reset`





HTML Tags: Forms

- Input

Ex: `<input type="password" name="pass" required>`

Ex: `<input type="file" name="fileupload">`

Ex: `<input type="reset" value="Reset the form">`

Ex: `<input type="hidden" name="var" value="val">`

Ex: `<input type="checkbox" value="car" checked>`

Ex: `<input type="text" name="x" value="y" placeholder="type here">`





HTML Tags: Forms

- Select

Ex:

```
<select name="job">
```

```
<option value="student">I'm a student</option>
```

```
<option value="faculty">I'm a faculty member</option>
```

```
<option value="none">Other</option>
```

```
</select>
```





HTML Tags: Forms

- Radio Buttons

Ex:

```
<form action="">
```

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

```
<input type="radio" name="gender" value="female"> Female<br>
```

```
<input type="radio" name="gender" value="other"> Other
```

```
</form>
```





HTML Tags: Forms

Step 2 of 2

Registration Details

University :

Institute :

Branch :

Degree : Pursuing Completed

Avarage CPI : Upto Th Semester

Experience : Years

Your Website Or Blog :

◀ Step 2 ▶





HTML Tags: Body Section

- Anchor text

Ex: `link title`

- Divide

Ex: `<div>a section of content</div>`

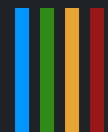
- `img`

Ex: ``

Under 125
Characters

- Heading (1,2,3,4,5,6)

Ex: `<h1>The Title of a paragraph</h1>`



Body Section



Your Webpage

[Home](#) [Products](#) [Blog](#) [About](#) [Contact](#)

[celebrity news blog](#)

Why? Because both are linking to the same page, and Google only considers the first anchor text they see.

This anchor text counts

This anchor text doesn't count



HTML Tags: Body Section

Ex:

```
<table>  
  <tr>  
    <td>1</td>  
    <td>2</td>  
    <td>3</td>  
  </tr>  
  <tr>  
    <td>4</td>  
    <td>5</td>  
    <td>6</td>  
  </tr>  
</table>
```

Table

1	2	3
4	5	6





The Whole Page

```
<!DOCTYPE HTML>
```

```
<html>
```

Note that google doesn't use meta keyword tags for ranking.

```
<head>
```



```
<title>Amirkabir University of Technology</title>
```

```
<meta name="description" content="about the page">
```

```
<meta name="keywords" content="k1, k2, ..." >
```

```
<meta name="author" content="Arman Malekzade">
```

```
<meta name="viewport" content="width=device-width, initial-scale=1.0">
```

```
<script src="main.js"></script>
```

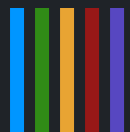
```
</head>
```





The Whole Page

```
<body>
<div>
<h2>What is Lorem Ipsum?</h2>
<p>
Lorem Ipsum is simply dummy text of the printing and
typesetting industry.
<p>
<a href="..."></a>
</p>
</div>
</body>
</html>
```





References

- [1] What is Hypertext - Retrieved Feb 20, 2017 from <https://www.w3.org/WhatIs.html>
- [2] Google SEO: Should Titles & H1 Tags Be Exactly The Same? - Retrieved Feb 20, 2017 from <https://www.seroundtable.com/google-title-h1-identical-19923.html>
- [3] HTML5 Tutorial - Retrieved Feb 20, 2017 from <https://www.w3schools.com/html/default.asp>
- [4] 5 billion searches are performed every day. Be found. <http://moz.com>
- [5] br, hr, p and pre Tags and SEO - Retrieved Feb 20, 2017 from <http://www.pitstopmedia.com/sem/br-hr-p-pre-tag-seo>

