



ICEPT
BEGIN TO EXCEL

Web Development

Session 1

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Course Objectives

- ▶ During the course students will be able to:
 - ▶ Understand World Wide Web,
 - ▶ Design Static website using HTML & CSS,
 - ▶ Design Dynamic web site using PHP,
 - ▶ Develop Web-based Applications,
 - ▶ Use JavaScript & jQuery for Interactive web development.

Course Distribution

► Course is divided in Five parts

1. HTML & CSS
2. PHP
3. MySQL
4. JavaScript & jQuery
5. AJAX

Online Resources

- ▶ <http://www.w3schools.com/html/default.asp>
- ▶ <http://www.w3schools.com/css/default.asp>
- ▶ <http://www.w3schools.com/php/>
- ▶ <https://secure.php.net/>
- ▶ <http://www.w3schools.com/js/default.asp>
- ▶ <http://www.w3schools.com/jquery/default.asp>
- ▶ <http://www.w3schools.com/json/>



Hypertext Markup Language

HTML

- ▶ HTML is formatting language used to develop web pages
- ▶ HTML is not a programming language
- ▶ HTML stands for **H**yper **T**ext **M**arkup **L**anguage
- ▶ A markup language is set of **markup tags**
- ▶ **tags** or **markups** to specify how the contents of web page will be displayed
- ▶ Each HTML tag **describes** different document content

HTML

- ▶ Before starting HTML coding
- ▶ Prepare your tools
- ▶ You can simply use a text editor
 - ▶ Notepad, Notepad++ on Windows
 - ▶ TextEdit on a Mac
 - ▶ Brackets
- ▶ Save your files with the **.html** file extension

Benefits of HTML

▶ Simplicity

- ▶ HTML is simple but powerful language.
- ▶ Any person can use HTML easily to create web pages.

▶ Platform Independent

- ▶ It works on any platform.
- ▶ It means that HTML document created for one type of computer system can be used of different types of computer system.

Benefits of HTML

▶ Easy Navigation

- ▶ HTML web pages are linked together using hyperlinks.
- ▶ It provides easy navigation between different documents.

▶ Attractive and Easier to read

- ▶ HTML allows the use of graphics and animations.
- ▶ It delivers rich content and arranges the contents creatively.

Limitations of HTML

- ▶ **No Programming Capabilities**
 - ▶ HTML provides no programming capabilities.
 - ▶ It only provides formatting text, pictures and sound, etc.
- ▶ **Static**
 - ▶ HTML can only be used to create static web pages.
- ▶ **Fixed Tag Set**
 - ▶ HTML does not provide the facility to create customized tags.
 - ▶ It is not possible to extend HTML.
- ▶ **Not Reusable**
 - ▶ HTML code is used for specific pages and cannot be reused.

HTML Example

```
<!DOCTYPE html>
<html>
  <head>
    <title>Page Title</title>
  </head>
  <body>

    <h1>My First Heading</h1>
    <p>My first paragraph.</p>

  </body>
</html>
```

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

Web Browsers

- ▶ The purpose of a web browser (Chrome, IE, Firefox, Safari) is to read HTML documents and display them.
- ▶ The browser does not display the HTML tags,
 - ▶ but uses them to determine how to display the document

HTML Page Structure

```
<html>
```

```
<head>
```

```
<title>Page title</title>
```

```
</head>
```

```
<body>
```

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

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

```
<p>This is another paragraph.</p>
```

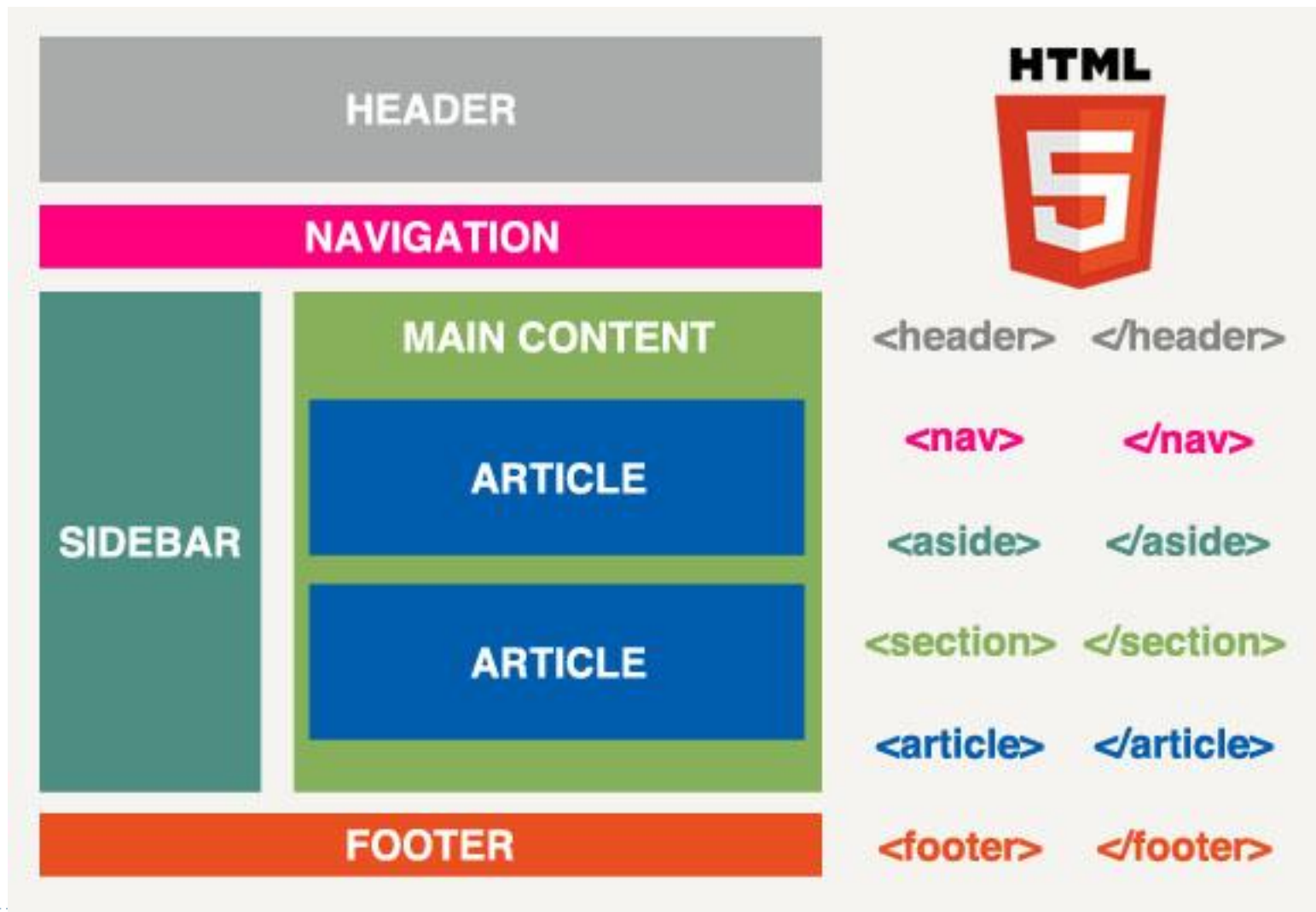
```
</body>
```

```
</html>
```

HTML Versions

Version	Year
HTML	1991
HTML 2.0	1995
HTML 3.2	1997
HTML 4.01	1999
XHTML	2000
HTML5	2014

HTML5 Design Model



Let's Start Development

- ▶ Open your favorite text editor
- ▶ Start Demo

Tags and Elements

- ▶ Paragraphs `<p>` `</p>`
- ▶ Line break `
`
- ▶ Horizontal line `<hr/>`
- ▶ Headings `<h1>`, `<h2>`, `<h3>`, `<h4>`, `<h5>`, `<h6>`,
- ▶ Space ` `
- ▶ Pre-formatting `<pre>`
- ▶ Grouping elements, `<div>`, `<header>`, `<hgroup>`,
`<nav>`, `<section>`, `<article>`

Display Images

- ▶ `<figure>` tag
- ▶ ``
- ▶ `<figcaption>`



Links and Navigation in HTML

Links

- ▶ When we link to another page in our own web site,
 - ▶ the link is known as an internal link.
- ▶ When we link to a different site,
 - ▶ it is known as an external link.
- ▶ A link is specified using the `<a>` element.
- ▶ Anything between the opening `<a>` tag and the closing `` tag becomes part of the link that users can click in a browser.

Linking to Other Web Pages

- ▶ To link to another web page, the opening `<a>` tag must carry an attribute called href;
 - ▶ the value of the href attribute is the name of the file you are linking to.

- ▶ Example

```
<body>
```

```
    <p> Return to the <a href="index.html"> home  
    page </a> . </p>
```

```
</body>
```

Linking to Other Web Pages

- ▶ If we want to link to a different site, we can use the `<a>` element again,
 - ▶ but this time we specify the full web address for the page we want to link to rather than just the filename.
- ▶ Here is an example of a link that will take us to an external site, in this case the Wrox web site:

```
<body>
```

```
    <p> Why not visit the <a href="http://www.wrox.com/">
```

```
    Wrox web site </a>    ? </p>
```

```
</body>
```

Linking to Other Web Pages

- ▶ We can also use the title attribute on a link.
- ▶ The value of the title attribute should be a description of what the link will take us to,
 - ▶ which will be displayed in a tooltip when we hover over the link.
- ▶ This can be especially helpful if we do use an image for a link.
- ▶ The following is a link to the Google homepage.

<body>

```
<p> <a href="http://www.Google.com/" title="Search the  
Web with Google"> Google </a> is a very popular search  
engine. </p>
```

</body>