

Information lechnology

Web Technology



Lab 1: HTML

Course Outline

- 1. Hypertext Markup Language (HTML)
- 2. Cascading Style Sheets (CSS)
- 3. Java Script (JS)
- 4. Programming in PHP
- 5. MYSQL
- 6. Laravel framework





Web Development

developing a website for the Internet.

Web development can range from developing a simple single static page of plain text to complex web applications, and social network services







Frontend design

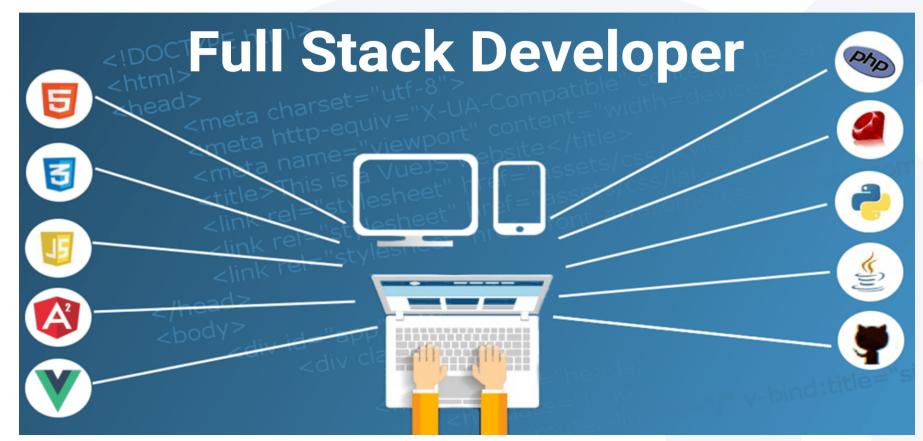
- "Frontend" Focuses on layout, animation, content organization, navigation, graphics.
- Technologies and Programing Languages:
 - HTML
 - CSS
 - JavaScript
 - jQuery
 - Bootstrap

Backend development

- "Backend" Focuses on building code, debugging, database management.
- Programing Languages:
 - PHP, Node.js, Ruby, ASP.NET, Java, and other programming languages











If you study hard this course, you will be full stack developer and can join any company







Tools

Browser (Internet Explorer, Chrome, ...)



Editor:

Notepad++, Visual Studio Code





HTML 5 (Part 1)





HTML 5

- HTML (HyperText Markup Language) is the language used to create web page documents, structure your web content, and give it meaning and purpose.
- HTML is not a programming language; it is a markup language, which means it is a system for identifying and describing the various components of a document such as headings, paragraphs, and lists.
- There are a few versions of HTML the most firmly established while HTML5 is the newer

New in HTML5

- New semantic elements like <header>,<footer>, <article>, and <section>.
- New form controls like number, date, time, calendar.
- New graphic elements.
- New multimedia elements: <audio> and <video>.
 - HTML Drag and Drop



HTML PAGE FORMAT

HTML tags are keywords (tag names) surrounded by angle brackets:

- Types of Tags:
 - Paired Tags: is the start tag, the second tag is the end tag like

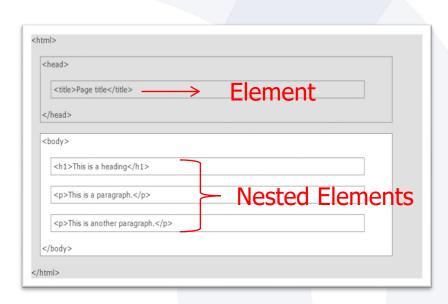
Unpaired Tags: only has an opening tag and does not have a closing.

Self-Closing Tags: do not have a partner tag, the first tag is the only necessary tag Like



HTML PAGE FORMAT

```
<!DOCTYPE html> <!-- Defines the document type to be HTML -->
<html>
  <head>
        <title> first web page! </title>
  </head>
  <body>
     <h1> hello world </h1>
     <!-- rest of page goes here.
       this is a comment. -->
```





HTML ATTRIBUTES

<body attribute_name = "attribute_value" >

- The lang Attribute (Language)
 - 1. <!DOCTYPE html> <html lang="en-US">
- 2. The title Attribute
 -
 - If you move the mouse over the paragraph above, the title will display as a tooltip
- 3. The size, alt Attributes
 -
 - The alt attribute specifies an alternative text to be used, when an HTML element cannot be displayed.



HTML TAGS





1. HTML Headings

headings are important in html documents!!

- $\langle h1 \dots \rangle$ Heading $1 \langle h1 \rangle \rightarrow$ largest of the six
- <h2 ...> Heading 2 </h2>
- <h3 ...> Heading 3 </h3>
- <h4 ...> Heading 4 </h4>
- <h5 ...> Heading 5 </h5>
- <h6 ...> Heading 6 </h6> → smallest of the six

align="position" -- left (default), center or right

<h1>Heading 1</h1><h2>Heading 2</h2>

<h3>Heading 3</h3>

<h4>Heading 4</h4>

<h5>Heading 5</h5>

<h6>Heading 6</h6>



1. HTML Headings

```
<HTML>
    <HEAD>
       <TITLE> Document Headings </TITLE>
   </HEAD>
  <BODY>
    Samples of the six heading types:
    <H1> Level-1 (H1) </H1>
    <H2 ALIGN="center">Level-2 (H2)</H2>
    <H3> <U> Level-3 (H3) </U> </H3>
    <H4 ALIGN="right"> Level-4 (H4) </H4>
    <H5> Level-5 (H5) </H5>
    <H6> Level-6 (H6) </H6>
 </BODY>
 </HTML>
```

1. HTML Headings

Output

Samples of the six heading types:

Level-1 (H1)

Level-2 (H2)

<u>Level-3 (H3)</u>

Level-4 (H4)

Level-5 (H5)

Level-6 (H6)





2. HTML Paragraph

- <P> defines a paragraph
- Add ALIGN="position" (left, center, right)
- Use
 for blank line
- Fully-specified text uses <P> and </P>
- But </P> is optional



2. HTML Paragraph

```
<HTML>
    <HEAD>
       <TITLE> Document Paragraph </TITLE>
    </HEAD>
 <BODY>
     <P> Here is some text </P>
     <P ALIGN="center"> Centered text </P>
     <br><br><br>
     <P ALIGN="right"> Right-justified text
     <!-- Note: no closing /P tag is not a problem -->
 </BODY>
 </HTML>
```



2. HTML Paragraph

Output

Here is some text

Centered text

Right-justified text





3. HTML Preformatted

- <Pre> defines a Preformatted
- Text in a element is displayed in a fixed-width font, and the text
 preserves both spaces and line breaks. The text will be displayed exactly as
 written in the HTML source code.



3. HTML Preformatted

```
<HEAD>
   <TITLE> Preformatted Text </TITLE>
</HEAD>
<BODY>
   <h5> The pre tag is needed for displaying poems: </h5>
   <PRE>
       if (a < b) {
            a++;
           b = c * d;
   </PRE>
   <h5> The p tag is needed for displaying poems: </h5>
   >
       if (a < b) {
            a++;
           b = c * d;
   </BODY>
```



</HTML>

3. HTML Preformatted

Output

The pre tag is needed for displaying poems:

```
if (a < b) {
    a++;
    b = c * d;
}
```

The p tag is needed for displaying poems:

if
$$(a < b) \{ a++; b = c * d; \}$$



4. HTML Formatting

```
<HEAD>
   <TITLE> Preformatted Text </TITLE>
</HEAD>
<BODY>
    <H1> Physical Character Styles </H1>
    <B> Bold </B> <BR>
    <I> Italic </I> <BR>
    <U>> Underlined </U> <BR>
    Subscripts: f <SUB> 0 </SUB> + f <SUB> 1 </SUB> <BR>
    Superscripts: x <SUP> 2 </SUP> + y <SUP> 2 </SUP> <BR>
    <SMALL> Smaller </SMALL> <BR>
    <BIG> Bigger </BIG> <BR>
    <B> <I> Bold Italic </I> </B> <BR>
    <SMALL> <I> Small Italic </I> </SMALL> <BR>
    <FONT COLOR="GRAY"> Gray </FONT> <BR>
    <DEL> Delete </DEL> <BR>
    <INS> Insert </INS> <BR>
    <ABBR TITLE ="Java Development Kit"> JDK Acronym </ABBR>
</BODY>
```

Physical Character Styles

Bold

Italic

Underlined

Subscripts: $f_0 + f_1$

Superscripts: $x^2 + y^2$

Smaller

Bigger

Bold Italic

Small Italic

Gray

Delete

<u>Insert</u>

JDK Acronym





- defines a Image
- The tag has two required attributes:
 - src Specifies the path to the image
 - alt Specifies an alternate text for the image, if the image for some reason cannot be displayed
- width, height may be in units of pixels or percentage of page or frame
 - width = "357"
 - height = "30%"





Align = position	Image / Text Placement
Left	Image on left edge; text flows to right of image
Right	Image on right edge; text flows to left
Тор	Image is left; words align with top of image
Bottom	Image is left; words align with bottom of image
Middle	Words align with middle of image

```
align="left"
```

```
<HTML>
    <HEAD>
        <TITLE> Images </TITLE>
    </HEAD>
    <BODY>
        <img src="dolphin.jpg" align="left" width="150"</pre>
height="150" alt="dolphin jump!">
        This is a very cute dolphin on the left! <br>
        This is a very cute dolphin on the left! <br>
        This is a very cute dolphin on the left! <br>
        This is a very cute dolphin on the left! <br>
        You can see text wrap around it <br>
    </BODY>
</HTML>
```



This is a very cute dolphin on the left! This is a very cute dolphin on the left! This is a very cute dolphin on the left! This is a very cute dolphin on the left! This is a very cute dolphin on the left! This is a very cute dolphin on the left! This is a very cute dolphin on the left! This is a very cute dolphin on the left!

This is a very cute dolphin on the left! This is a very cute dolphin on the left! You can see text wrap around it



```
align="right"
<HTML>
   <HEAD>
       <TITLE> Images </TITLE>
   </HEAD>
   <BODY>
       <img src="dolphin.jpg" align="right" width="150" height="150" alt="dolphin jump!">
       This is a very cute dolphin on the left! <br>
       This is a very cute dolphin on the left! <br>
       This is a very cute dolphin on the left! <br>
       This is a very cute dolphin on the left! <br>
       You can see text wrap around it <br>
```

</BODY>



This is a very cute dolphin on the left! This is a very cute dolphin on the left! This is a very cute dolphin on the left! This is a very cute dolphin on the left! This is a very cute dolphin on the left! This is a very cute dolphin on the left! This is a very cute dolphin on the left! This is a very cute dolphin on the left! This is a very cute dolphin on the left! This is a very cute dolphin on the left! This is a very cute dolphin on the left! You can see text wrap around it



6. HTML Hyperlinks

- <a> defines a hyperlink
- A hyperlink is an element, a text, or an image that you can click on, and jump to another document.
- The most important attribute of the <a> element is the href attribute,
 which indicates the link's destination.
- _blank : Opens the linked document in a new window or tab
- _self : Opens the linked document in a same frame (default)



6. HTML Hyperlinks

(Element) Hyperlinks

```
<HTML>
    <HEAD>
        <TITLE> HyperLinks </TITLE>
    </HEAD>
    <BODY>
       Welcome to
        <a href="http://www.eelu.edu.eg" target="_blank">
            <STRONG> EELU </STRONG>
        </a>
            at the <a href ="www.eelu.edu.eg"> EELU University.</a>
    </BODY>
</HTML>
```



6. HTML Hyperlinks

(Image) Hyperlinks

```
<HTML>
    <HEAD>
        <TITLE> HyperLinks </TITLE>
    </HEAD>
    <BODY>
       Welcome to
        <a href="http://www.eelu.edu.eg" target="_self">
            <img src="smiley.gif" alt="HTML tutorial">
        </a>
            at the <a href ="www.eelu.edu.eg"> EELU University.</a>
   </BODY>
</HTML>
```



7. HTML Videos

- <video> tag is used to embed video content in a document, such as a movie
 clip or other video streams.
- The <video> tag contains one or more <source> tags with different video sources.
- controls: adds video controls, like play, pause, and volume.
- src : Specifies the URL of the video file
- autoplay: to start a video automatically.



7. HTML Videos

```
<video width="320" height="240" controls>
    <source src="movie.mp4" type="video/mp4">
        <source src="movie.ogg" type="video/ogg">
        Your browser does not support the video tag.
</video>
```



8. HTML Audios

- <audio> tag is used to embed sound content in a document, such as music or other audio streams.
- The <audio> tag contains one or more <source> tags with different audio sources.
- controls: adds video controls, like play, pause, and volume.
- src : Specifies the URL of the video file
- autoplay: to start a video automatically.



8. HTML Audios

```
<audio controls>
  <source src="horse.mp3" type="audio/mpeg">
  Your browser does not support the audio tag.
</audio>
```





