



Web Technologies

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2. Fundamentals of HTML



What is HTML?

- HTML stands for Hyper Text Markup Language.
- HTML is the standard markup language for creating Web pages.
- HTML describes the structure of a Web page.
- HTML consists of a series of elements.
- HTML elements tell the browser how to display the content.
- HTML elements label pieces of content such as "this is a heading", "this is a paragraph", "this is a link", etc...
- Using HTML, you can create a Web page with text, graphics, sound, and video.



Tags in HTML

- The essence of HTML programming is tags.
- A tag is a keyword enclosed by angle brackets. (Example: `<HTML>`)
- There are opening and closing tags for many but not all tags; The affected text is between the two tags.
- The opening and closing tags use the same command except the closing tag contains an additional forward slash /

Structure of a Web Page



- All Web pages share a common structure.
- All Web pages should contain a pair of `<HTML>`, `<HEAD>`, `<TITLE>`, and `<BODY>` tags.

`<HTML>`

`<HEAD>`

`<TITLE>` Example
`</TITLE>`

`</HEAD>`

`<BODY>`

This is where you would include the text and images on your Web page.

`</BODY>`

`</HTML>`

Tags in HTML



- The `<html>` element is the root element of an HTML page.
- The `<head>` element is used to define the head portion of the document which contains information related to the document
- The `<title>` element specifies a title for the HTML page (which is shown in the browser's title bar or in the page's tab).
- The `<body>` element defines the document's body, and is a container for all the visible contents, such as headings, paragraphs, images, hyperlinks, tables, lists, etc.
- The `<h1>` element defines a large heading.
- The `<p>` element defines a paragraph.



Nested Tags

➤ Whenever you have HTML tags within other HTML tags, you must close the nearest tag first.

➤ Example:

➤ `<H1> <I> The Nation </I> </H1>`

Text Formatting



- Manipulating text in HTML can be tricky; Oftentimes, what you see is NOT what you get.
- For instance, special HTML tags are needed to create paragraphs, move to the next line, and create headings.

Text Formatting Tags

 Bold Face

<I> *Italics* </I>

<U> Underline </U>

<P> New Paragraph </P>

 Next Line





Headings

- Web pages are typically organized into sections with headings; To create a heading use the expression `<Hn>....</Hn>` where n is a number between 1 and 6.
- In this case, the 1 corresponds to the largest size heading while the 6 corresponds to the smallest size.



Comment Statements

- Comment statements are notes in the HTML code that explain the important features of the code.
- The comments do not appear on the Web page itself but are a useful reference to the author of the page and other programmers.
- To create a comment statement, use the `<!-- -->` tags.



HTML – Attributes

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

```
<html>  
<head>  
<title>This is document title</title>  
</head>  
<body bgcolor="red">  
<h1 align="right">This is a heading</h1>  
</body>  
</head>  
</html>
```



HTML Lists

- HTML lists allow web developers to group a set of related items in lists.
- Three main types of lists:
 - Unordered lists
 - Ordered lists
 - Description lists



Unordered lists

- The HTML `` tag defines an unordered (bulleted) list.
- An unordered list starts with the `` tag. Each list item starts with the `` tag.
- The list items will be marked with bullets (small black circles) by default.

Ex:

```
<ul>  
  <li>Coffee</li>  
  <li>Tea</li>  
  <li>Milk</li>  
</ul>
```



Ordered lists

- The HTML `` tag defines an ordered list. An ordered list can be numerical or alphabetical.
- An ordered list starts with the `` tag. Each list item starts with the `` tag.
- The list items will be marked with numbers by default.

Ex:

```
<ol>  
  <li>Coffee</li>  
  <li>Tea</li>  
  <li>Milk</li>  
</ol>
```



Ordered lists – The Type Attribute

- The type attribute of the tag, defines the type of the list item marker.

Type	Description
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

Ex:

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




Description lists

- A description list is a list of terms, with a description of each term.
- The `<dl>` tag defines the description list, the `<dt>` tag defines the term (name), and the `<dd>` tag describes each term.

Ex:

```
<dl>
  <dt>Coffee</dt>
  <dd>- black hot drink</dd>
  <dt>Milk</dt>
  <dd>- white cold drink</dd>
</dl>
```

Questions ???





Thank You.