6 HTML Hyper Text Markup Language

➢ Markup language is a language where you add instructions to text
➢ These instructions tell the computer how to display the text enclosed by the instructions
➢ HTML is a markup language

Example: **< please do this >** Hello HTML coders **< /end please do this>**

➢ HTML describes the structure of Web pages using markup
➢ HTML elements are the building blocks of HTML pages
➢ HTML elements are represented by tags
➢ HTML tags label pieces of content such as "heading", "paragraph", "table", and so on
➢ Browsers do not display the HTML tags, but use them to render the content of the page

6.1 Coding Markup

➢ Before 2000s the only way to write HTML was by hand.
➢ You typed the text and then added the HTML tags.
➢ These days you almost don't need to know HTML or CSS to do the same, as there are many tools to help you with this.
➢ Tools you might be using in the future:
  - DreamWeaver
  - Visual Studio
  - Expression Web
  - Notapad++
➢ This kind of tools makes web development easier, but they generate code for you, so when you need to maintain it, it will be hard & obscure to modify things when website gets complex.
➢ Imagine you need to add google map on the website with custom code and you cannot drag 'n drop it...so you have to know at least basic things in HTML.
➢ Developers don't drag 'n drop, they code.

7 How Websites Are Created

All websites use HTML and CSS, but content management systems, blogging software and e-commerce platforms often add a few more technologies into the mix.

7.1 What You See

➢ When you are looking at a website, it is most likely that your browser will be receiving HTML and CSS from the web server that hosts the site.
➢ The web browser interprets the HTML and CSS code to create the page that you see.
➢ Most web pages also include extra content such as images, audio, video or animations.

7.2 How It Is Created

➢ Small websites are often written just using HTML and CSS.

➢ Larger websites - in particular those that are updated regularly and use a Content Management System (CMS), blogging tools, or e-commerce software; often make use of more complex technologies on the web server, but these technologies are actually used to produce HTML and CSS that is then sent to the browser.
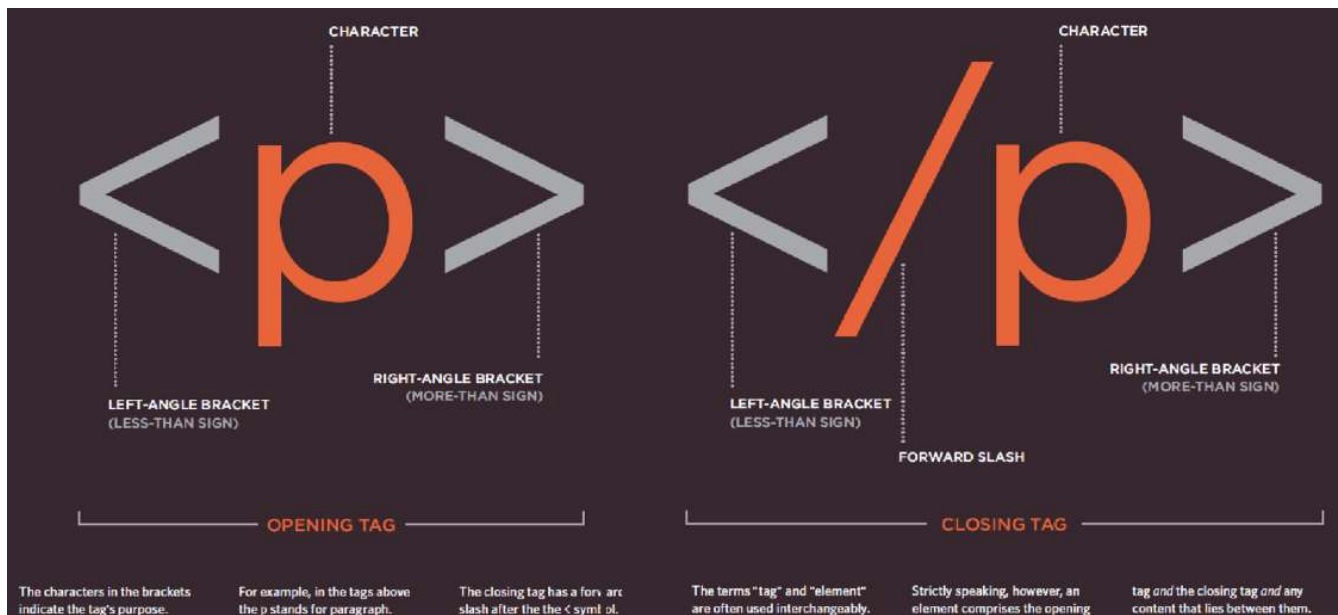
7.3   HTML5 & CSS3

➢ Since the web first created there have been several versions of the HTML and CSS - each intended to be an improvement on the previous version.
➢ The latest version are the HTML5 & CSS3.
➢ Because HTML5 & CSS3 build on previous versions of these languages, learning these means you will also be able to understand the earlier versions of them.

8   STRUCTURE

➢ All HTML documents must start with a document type declaration: <!DOCTYPE html>.
➢ The HTML document itself begins with <html> and ends with </html>.
➢ The visible part of the HTML document is between <body> and </body>.
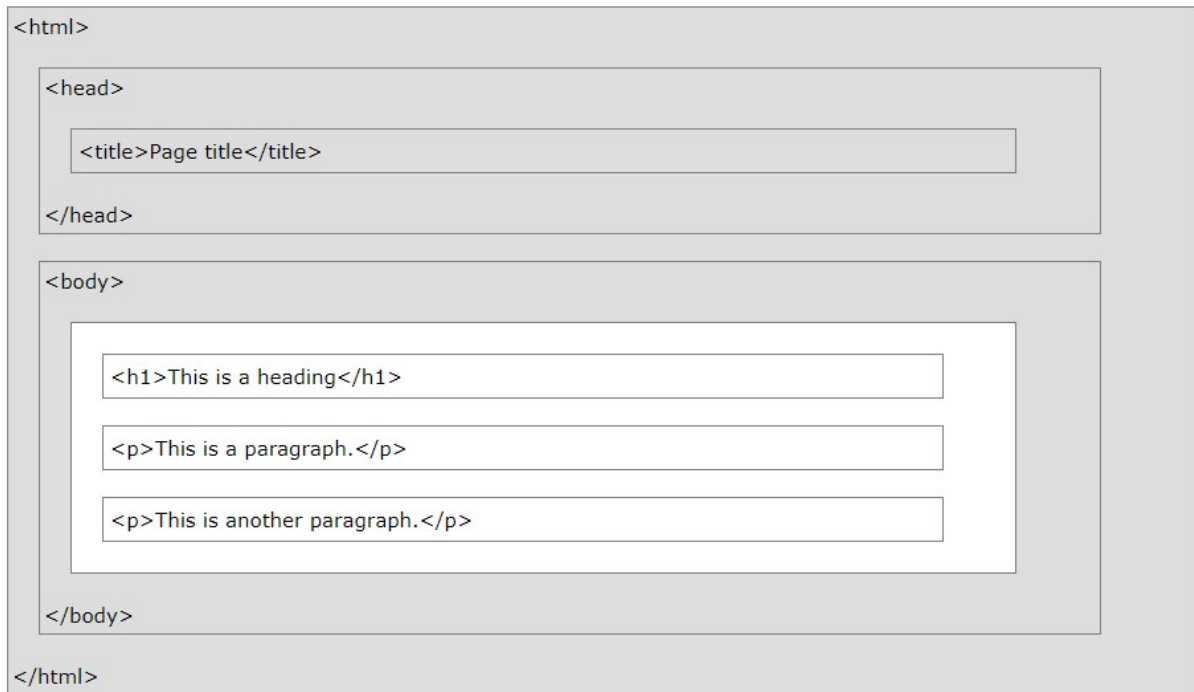
8.1   HTML DOCUMENT ELEMENTS

➢ An HTML document is comprised of elements.
➢ Elements exists for different things, such as headings, paragraphs, tables and other objects.
➢ An elements consists of an opening tag, content and closing tag.

❖ *HTML elements with no content are called empty elements. Empty elements do not have an end tag, such as the <br> element (which indicates a line break).*

8.2　HTML PAGE STRUCTURE

Below is a visualization of an 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>
```

❖　**Note:** *Only the content inside the <body> section (the white area above) is displayed in a browser.*

8.3　HTML TAGS

HTML tags are element names surrounded by angle brackets:

　　　　`<tagname>content goes here...</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 **forward slash** inserted before the tag name.

❖　**Tip:** *The start tag is also called the **opening tag**, and the end tag the **closing tag**.*

Elements examples:

- The `<!DOCTYPE html>` declaration defines this document to be HTML5.
- The `<html>` element is the root element of an HTML page.
- The `<head>` element contains meta information about the document.
- The `<title>` element specifies a title for the document.
- The `<body>` element contains the visible page content.
- The `<h1>` element defines a large heading.
- The `<p>` element defines a paragraph.

8.4   HTML Document Element Attributes

➤ Attributes tell us more about the elements
➤ Attributes define an element's properties
➤ Consider attributes as adjectives. For example, the image element contains a source attribute:

```
<img src="images/mypicture.png" alt="My picture"/>
```


➤ Attributes are name/value pairs like: **name="value".**
➤ Attributes provide browsers further instructions on rendering elements.

Example: `<table border="1">...</table>`

The table tag with attribute name border and value 1 tells the browser not only to create table tag but also to create border on that table. Also, it provides the value of the border to be 1 pixel wide.

8.4.1   The href Attribute

➤ HTML links are defined with the `<a>` tag. The link address is specified in the `href` attribute:

```
<a href="https://www.w3schools.com">This is a link</a>
```

8.4.2   The src Attribute

➤ HTML images are defined with the `<img>` tag. The filename of the image source is specified in the `src` attribute:

```
<img src="img_girl.jpg">
```

8.4.3   The width and height Attributes

➤ Images in HTML have a set of **size** attributes, which specifies the width and height of the image:

```
<img src="img_girl.jpg" width="500" height="600">
```

The image size is specified in pixels: width="500" means 500 pixels wide.

8.4.4   The alt Attribute

The `alt` attribute specifies an alternative text to be used, when an image cannot be displayed. The value of the attribute can be read by screen readers. This way, someone "listening" to the webpage, e.g. a vision impaired person, can "hear" the element.

```
<img src="img_girl.jpg" alt="Girl with a jacket">
```

❖ *The* `alt` *attribute is also useful if the image does not exist.*

8.4.5 The `style` Attribute

➤ The `style` attribute is used to specify the styling of an element, like color, font, size etc.

```
<p style="color:red">I am a paragraph</p>
```

8.4.6 The `lang` Attribute

➤ The language of the document can be declared in the `<html>` tag. The language is declared with the `lang` attribute.
➤ Declaring a language is important for accessibility applications (screen readers) and search engines:

```
<html lang="en-US">
```

The first two letters specify the language (en). If there is a dialect, use two more letters (US).

8.4.7 The `title` Attribute

Here, a `title` attribute is added to the `<p>` element. The value of the title attribute will be displayed as a tooltip when you mouse over the paragraph:

```
<p title="I'm a tooltip">
    This is a paragraph.
</p>
```

9 HTML BASIC STRUCTURE

➤ The first element in an HTML document should be the Document Type Definition (DTD)
➤ The DTD defines the HTML version
➤ There are three HTML 4.01 DTDs
   - HTML 4.01 Strict DTD
   - HTML 4.01 Transitional DTD
   - HTML 4.01 Frameset DTD
➤ In most of the situations, Transitional DTD is used:

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN"
"http://www.w3.org/TR/html4/loose.dtd">
```

You should know:

➤ If you do not specify a DTD your browser will revert to 'quicks' mode, and make its best to guess how to render the page!
➤ In **HTML5**, you don't specify DTD so the browser expects to support the HTML5 tags automatically thus understanding your markup semantically.
➤ In **HTML5**, we don't have/need DTD schema as it is standardized to follow the only provided standard for HTML5 documents. Read more at www.w3c.org

9.1 HTML Basic Structure - Anatomy

➢ Main HTML Document structure contains the following elements:
  o HTML
    ▪ Head
    ▪ Body

❖ *Tip for saving time: Create template for reusability*

9.2 HTML Comments

➢ HTML Comments will help you better describe what you create in your HTML Markup.
➢ HTML Comments are useful for you, other developers or those who read the HTML Document
➢ HTML Comments can be written using the following way:

```
<!-- HTML COMMENT HERE -->
```

9.3 HTML Headings

➢ HTML headings are defined with the `<h1>` to `<h6>` tags.
➢ `<h1>` defines the most important heading. `<h6>` defines the least important heading

9.4 HTML Paragraphs

➢ HTML paragraphs are defined with the `<p>` tag:

9.5 HTML Links

➢ HTML links are defined with the `<a>` tag:

```
<a href="https://www.w3schools.com">This is a link</a>
```

➢ The link's destination is specified in the `href` attribute.
➢ Attributes are used to provide additional information about HTML elements.

9.6   HTML IMAGES

➢ HTML images are defined with the `<img>` tag.
➢ The source file (`src`), alternative text (`alt`), `width`, and `height` are provided as attributes:

```
<img src="w3schools.jpg" alt="W3Schools.com" width="104" height="142">
```

9.7   HTML BUTTONS

➢ HTML buttons are defined with the `<button>` tag:

```
<button>Click me</button>
```

9.8   HTML LISTS

➢ HTML lists are defined with the `<ul>` (unordered/bullet list) or the `<ol>` (ordered/numbered list) tag, followed by `<li>` tags (list items):

10 Text Layout Tags

➢ Structural and semantic markup.
➢ HTML headings and paragraphs.
➢ Ordered and unordered list.
➢ Definition list.
➢ Quotations.
➢ Other text elements.
➢ Insert Special characters.

❖ *For your information, W3C deprecated most text formatting attributes, as the CSS does a better job. (we will learn CSS soon).*

10.1   MARKUP

• **Structural markup:** the elements that you can use to describe both headings and paragraphs.
• **Semantic markup:** which provides extra information; such as where emphasis is placed in a sentence, that something you have written is a quotation (and who said it), the meaning of acronyms, and so on.

11 Headings

HTML has six "levels" of headings: `<h1>`, `<h2>`, `<h3>`, `<h4>`, `<h5>`, `<h6>`.

Example

```
<h1>This is a Main Heading</h1>
<h2>This is a Level 2 Heading</h2>
<h3>This is a Level 3 Heading</h3>
<h4>This is a Level 4 Heading</h4>
<h5>This is a Level 5 Heading</h5>
<h6>This is a Level 6 Heading</h6>
```

12 Paragraphs

➢ To create a paragraph, surround the words that make up the paragraph with an opening **`<p>`** tag and closing **`</p>`** tag.
➢ By default, a browser will show each paragraph on a new line with some space between it and any subsequent paragraphs.

Example

```
<p>A paragraph consists of one or more sentences
    that form a self-contained unit of discourse.
    The start of a paragraph is indicated by a new line.</p>

<p>Text is easier to understand when it is split up
    into units of text. For example, a book may have
    chapters. Chapters can have subheadings. Under
    each heading there will be one or more
    paragraphs.</p>
```

❖ **Note:** *Dropping the end tag can produce unexpected results or errors.*

12.1   HTML Line Breaks

➢ The HTML **`<br>`** element defines a **line break**.
➢ Use **`<br>`** if you want a line break (a new line) without starting a new paragraph:

Example

```
<p>This is<br>a paragraph<br>with line breaks.</p>
```

This is
a paragraph
with line breaks

➢ The **`<br>`** tag is an empty tag, which means that it has no end tag.

12.2   The Poem Problem

➢ This poem will display on a single line:

Example

```
<p>
    My Bonnie lies over the ocean.

    My Bonnie lies over the sea.

    My Bonnie lies over the ocean.

    Oh, bring back my Bonnie to me.
</p>
```

In HTML, spaces and new lines are ignored:

My Bonnie lies over the ocean. My Bonnie lies over the sea. My Bonnie lies over the ocean. Oh, bring back my Bonnie to me.

12.3   The HTML `<pre>` Element

➢ The HTML **`<pre>`** element defines preformatted text.
➢ The text inside a **`<pre>`** element is displayed in a fixed-width font (usually Courier), and it preserves both spaces and line breaks:

Example

```
<pre>
    My Bonnie lies over the ocean.

    My Bonnie lies over the sea.

    My Bonnie lies over the ocean.

    Oh, bring back my Bonnie to me.
</pre>
```

The pre tag preserves both spaces and line breaks:

    My Bonnie lies over the ocean.

    My Bonnie lies over the sea.

    My Bonnie lies over the ocean.

    Oh, bring back my Bonnie to me.

13 HTML FORMATTING ELEMENTS

➢ HTML also defines special **elements** for defining text with a special **meaning**.

➢ HTML uses elements like `<b>` and `<i>` for formatting output, like **bold** or *italic* text.

➢ Formatting elements were designed to display special types of text:

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

13.1   HTML `<b>` AND `<strong>` ELEMENTS

➢ The HTML `<b>` element defines **bold** text, without any extra importance.

Example

```
<b>This text is bold</b>
```

This text is normal.

This text is bold.

➢ The HTML `<strong>` element defines **strong** text, with added semantic "strong" importance.

➢ The use of the `<strong>` element indicates that its content has strong importance. By default, browsers will show the contents of a `<strong>` element in **bold**.

Example

```
<strong>This text is strong</strong>
```

This text is normal.

This text is strong.

13.2   HTML `<i>` AND `<em>` ELEMENTS

➢ The HTML `<i>` element defines *italic* text, without any extra importance.

Example

```
<i>This text is italic</i>
```

This text is normal.

This text is italic.

➢ The HTML `<em>` element defines *emphasized* text, with added semantic importance.

➢ The **<em>** element indicates emphasis that subtly changes the meaning of a sentence. By default, browsers will show the contents of a **<em>** element in *italic*.

Example
```
<em>This text is emphasized</em>
```

This text is normal.

This text is emphasized.

❖ ***Note:*** *Browsers display <strong> as <b>, and <em> as <i>. However, there is a difference in the meaning of these tags: <b> and <i> defines bold and italic text, but <strong> and <em> means that the text is "important".*

13.3   HTML <small> Element

➢ The HTML **<small>** element defines smaller text:

HTML Small Formatting

Example
```
<h2>HTML <small>Small</small> Formatting</h2>
```

13.4   HTML <mark> Element

➢   The HTML **<mark>** element defines marked or highlighted text:

HTML Marked Formatting

Example
```
<h2>HTML <mark>Marked</mark> Formatting</h2>
```

13.5   HTML <del> Element

➢ The HTML **<del>** element defines ~~deleted~~ (removed) text.

The del element represents deleted (removed) text.

My favorite color is ~~blue~~ red.

Example
```
<p>My favorite color is <del>blue</del> red.</p>
```

13.6   HTML <ins> Element

➢ The HTML **<ins>** element defines <u>inserted</u> (added) text.

The ins element represent inserted (added) text.

My favorite <u>color</u> is red.

Example
```
<p>My favorite <ins>color</ins> is red.</p>
```

13.7   HTML <sub> Element

➢ The HTML **<sub>** element defines subscripted text.

This is subscripted text.

Example
```
<p>This is <sub>subscripted</sub> text.</p>
```

13.8   HTML <sup> Element

➢ The HTML **<sup>** element defines superscripted text.

This is superscripted text.

Example
```
<p>This is <sup>superscripted</sup> text.</p>
```

14 HTML Quotation and Citation Elements

14.1 HTML `<q>` FOR SHORT QUOTATIONS

The HTML `<q>` element defines a short quotation. Browsers usually insert quotation marks around the `<q>` element.

Example

```
<p>WWF's goal is to: <q>Build a future where people live in harmony with nature.</q></p>
```

WWF's goal is to: "Build a future where people live in harmony with nature."

14.2 HTML `<blockquote>` FOR QUOTATIONS

The HTML `<blockquote>` element defines a section that is quoted from another source. Browsers usually indent `<blockquote>` elements.

Example

```
<p>Here is a quote from WWF's website:</p>
<blockquote cite="http://www.worldwildlife.org/who/index.html">
For 50 years, WWF has been protecting the future of nature.
The world's leading conservation organization,
WWF works in 100 countries and is supported by
1.2 million members in the United States and
close to 5 million globally.
</blockquote>
```

Browsers usually indent blockquote elements.

For 50 years, WWF has been protecting the future of nature. The world's leading conservation organization, WWF works in 100 countries and is supported by 1.2 million members in the United States and close to 5 million globally.

14.3 HTML `<abbr>` FOR ABBREVIATIONS

The HTML `<abbr>` element defines an abbreviation or an acronym. Marking abbreviations can give useful information to browsers, translation systems and search-engines.

If you use an abbreviation or an acronym, then the `<abbr>` element can be used. A title attribute on the opening tag is used to specify the full term.

```
<p><abbr title="Professor">Prof</abbr> Stephen Hawking is
    a theoretical physicist and cosmologist.</p>

<p><abbr title="National Aeronautics and Space Administration">NASA</abbr>
    do some crazy stuff.</p>
```

Example

```
<p>The <abbr title="World Health Organization">WHO</abbr> was founded in 1948.</p>
```

The WHO was founded in 1948.

World Health Organization

Marking up abbreviations can give useful information to browsers, translation systems and search-engines.

14.4   HTML `<address>` for Contact Information

The HTML `<address>` element defines contact information (author/owner) of a document or an article.

The `<address>` element is usually displayed in italic. Most browsers will add a line break before and after the element.

Example

```html
<address>
Written by John Doe.<br>
Visit us at:<br>
Example.com<br>
Box 564, Disneyland<br>
USA
</address>
```

> Written by John Doe.
> Visit us at:
> Example.com
> Box 564, Disneyland
> USA

14.5   HTML `<cite>` for Work Title

The HTML `<cite>` element defines the title of a work. Browsers usually display `<cite>` elements in italic.

Example

```html
<p>The HTML cite element defines the title of a work.</p>
<p>Browsers usually display cite elements in italic.</p>

<img src="img_the_scream.jpg" width="220" height="277" alt="The Scream">
<p><cite>The Scream</cite> by Edvard Munch. Painted in 1893.</p>
```

The HTML cite element defines the title of a work.
Browsers usually display cite elements in italic.

The Scream by Edvard Munch. Painted in 1893.

14.6   HTML `<bdo>` for Bi-Directional Override

The HTML `<bdo>` element defines bi-directional override. The `<bdo>` element is used to override the current text direction:

Example

```
<p>If your browser supports bi-directional override (bdo), the next line will
be written from right to left (rtl):</p>

<bdo dir="rtl">This line will be written from right to left</bdo>
```

If your browser supports bi-directional override (bdo), the next line will be written from right to left (rtl):

tfel ot thgir morf nettirw eb lliw enil sihT

15 Line Breaks & Horizontal Rules

**
**

- As you have already seen, the browser will automatically show each new paragraph or heading on a new line. But if you wanted to add a line break inside the middle of a paragraph you can use the line break tag **
.**

<hr />

- To create a break between themes — such as a change of topic in a book or a new scene in a play — you can add a horizontal rule between sections using the **<hr />.**

16 White Space

In order to make code easier to read, web developers often add extra spaces or start some elements on new lines. When the browser comes across two or more spaces next to each other, it only displays one space. Similarly if it comes across a line break, it treats that as a single space too. This is known as **white space collapsing.**

```
<p>The moon is drifting away from Earth.</p>
<p>The moon              is drifting away from Earth.</p>
<p>The moon is drifting away from
Earth.</p>
```

The result of all of them will be: The moon is drifting away from Earth.

17 Semantic Markups

17.1 Other Important Text Formatting Elements

➢ **<dfn>**Definition**</dfn>** - *Definition*

17.2 Escape Characters

There are some characters that are used in and reserved by HTML code. (For example, the left and right angled brackets).

Therefore, if you want these characters to appear on your page you need to use what are termed "escape" characters (also known as escape codes or entity references).

http://www.w3schools.com/html/html_symbols.asp
http://www.htmlandcssbook.com/extras/html-escape-codes/

	Less-than sign < <	¢	Cent sign ¢ ¢	'	Left single quote ‘ ‘
>	Greater-than sign > &	£	Pound sign £ £	'	Right single quote ’ ’
&	Ampersand & &	¥	Yen sign ¥ ¥	"	Left double quotes “ “
"	Quotation mark " "	€	Euro sign € €	"	Right double quotes ” ”
		©	Copyright symbol © ©	×	Multiplication sign × ×
		®	Registered trademark ® ®	÷	Division sign ÷ ÷
		TM	Trademark ™ ™		

18 Lists

There are lots of occasions when we need to use lists. HTML provides us with three different types:

➢ **Ordered lists:** are lists where each item in the list is numbered. For example, the list might be a set of steps for a recipe that must be performed in order, or a legal contract where each point needs to be identified by a section number.
➢ **Unordered lists:** are lists that begin with a bullet point (rather than characters that indicate order).
➢ **Definition lists:** are made up of a set of terms along with the definitions for each of those terms.

18.1 Ordered Lists

➢ The ordered list is created with the `<ol>` element.
➢ Each item in the list is placed between an opening `<li>` tag and a closing `</li>` tag. (The `li` stands for list item.)
➢ The list items will be marked with numbers by default:

Example

```
<h2>An ordered HTML list</h2>
<ol>
  <li>Coffee</li>
  <li>Tea</li>
  <li>Milk</li>
</ol>
```

An ordered HTML list
1. Coffee
2. Tea
3. Milk

18.1.1 Ordered List – The type Attribute

The type attribute of the `<ol>` 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

Numbers:

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

Ordered List with Numbers

1. Coffee
2. Tea
3. Milk

Uppercase Letters:

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

Ordered List with Letters

A. Coffee
B. Tea
C. Milk

Lowercase Letters:

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

Ordered List with Lowercase Letters

a. Coffee
b. Tea
c. Milk

Uppercase Roman Numbers:

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

Ordered List with Roman Numbers

I. Coffee
II. Tea
III. Milk

Lowercase Roman Numbers:

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

Ordered List with Lowercase Roman Numbers

i. Coffee
ii. Tea
iii. Milk

18.2   UNORDERED LISTS

➤ The unordered list is created with the `<ul>` element.
➤ Each item in the list is placed between an opening `<li>` tag and a closing `</li>` tag.
(The `li` stands for list item.)
➤ The list items will be marked with bullets (small black circles) by default:

Example

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

An unordered HTML list

- Coffee
- Tea
- Milk

18.2.1 Unordered List - Choose List Item Marker

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

Value	Description
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

Example - Disc

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

Unordered List with Disc Bullets

- Coffee
- Tea
- Milk

Example - Circle

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

Unordered List with Circle Bullets

○ Coffee
○ Tea
○ Milk

Example - Square

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

Unordered List with Square Bullets

▪ Coffee
▪ Tea
▪ Milk

Example - None

```
<ul style="list-style-type:none">
   <li>Coffee</li>
   <li>Tea</li>
   <li>Milk</li>
</ul>
```

Unordered List without Bullets

Coffee
Tea
Milk

18.3   Definition (Description) Lists

➢ The definition list is created with the `<dl>` element and usually consists of a series of terms and their definitions.

➢ Inside the `<dl>` element you will usually see pairs of `<dt>`and `<dd>` elements.

➢ `<dt>` is used to contain the term being defined (the definition term).

➢ `<dd>` is used to contain the definition.

➢ 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:

Example

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

A Description List

Coffee
   - black hot drink
Milk
   - white cold drink

18.4   Nested Lists

➢ You can put a second list inside a `<li>` element to create a sub-list or nested list.

Example

```
<ul>
   <li>Coffee</li>
   <li>Tea
     <ul>
        <li>Black tea</li>
        <li>Green tea</li>
     </ul>
   </li>
   <li>Milk</li>
</ul>
```

A Nested List

List can be nested (lists inside lists):

• Coffee
• Tea
   o Black tea
   o Green tea
• Milk

❖   **Note:** *List items can contain new list, and other HTML elements, like images and links, etc.*

19 CONTROL LIST COUNTING

By default, an ordered list will start counting from 1. If you want to start counting from a specified number, you can use the start attribute:

Example

```html
<h2>The start attribute</h2>
<p>By default, an ordered list will start counting from 1. Use the start
attribute to start counting from a specified number:</p>

<ol start="50">
  <li>Coffee</li>
  <li>Tea</li>
  <li>Milk</li>
</ol>

<ol type="I" start="50">
  <li>Coffee</li>
  <li>Tea</li>
  <li>Milk</li>
</ol>
```

The start attribute

By default, an ordered list will start counting from 1. Use the start attribute to start counting from a specified number:

50. Coffee
51. Tea
52. Milk

  L. Coffee
 LI. Tea
LII. Milk