

# Chapter - 4

## Advanced XHTML

### \*Lists- <li>

- A list is a record of short pieces of information.
- HTML Lists are used to specify lists of information.
- All lists may contain one or more list elements.
- There are three different types of HTML lists:

→ **Ordered List or Numbered List (ol)**

→ **Unordered List or Bulleted List (ul)**

→ **Description List or Definition List (dl)**

Ordered List or Numbered List  
<ol>

- In the ordered HTML lists, all the list items are marked with **numbers** by default. It is known as numbered list also. The ordered list starts with **<ol>** tag and the list items start with **<li>** tag.

```
<html>
<body>
<ol>
  <li>Aries</li>
  <li>Bingo</li>
  <li>Leo</li>
  <li>Scorpio</li>
</ol>
</body>
</html>
```

1. Aries  
2. Bingo  
3. Leo  
4. Scorpio

### Types of 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: type="1"

```
<html>
<body>

<h2>Ordered List with Numbers</h2>

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

</body>
</html>
```

### Ordered List with Numbers

1. Coffee
2. Tea
3. Milk

## Uppercase Letters: type="A"

```
<html>
<body>

<h2>Ordered List with Letters</h2>

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

</body>
</html>
```

### Ordered List with Letters

- A. Coffee
- B. Tea
- C. Milk

## Lowercase Letters: type="a"

```
<html>
<body>

<h2>Ordered List with Lowercase Letters</h2>

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

</body>
</html>
```

### Ordered List with Lowercase Letters

- a. Coffee
- b. Tea
- c. Milk

## Uppercase Roman Numbers: type="I"

```
<html>
<body>

<h2>Ordered List with Roman Numbers</h2>

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

</body>
</html>
```

### Ordered List with Roman Numbers

- I. Coffee
- II. Tea
- III. Milk

## Lowercase Roman Numbers: `type="i"`

```
<html>
<body>

<h2>Ordered List with Lowercase Roman Numbers</h2>

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

</body>
</html>
```

### Ordered List with Lowercase Roman Numbers

- i. Coffee
- ii. Tea
- iii. Milk

## 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:

```
<html>
<body>

<h2>The start attribute</h2>

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

</body>
</html>
```

### The start attribute

50. Coffee
51. Tea
52. Milk

## Unordered List or Bulleted List `<ul>`

- In HTML Unordered list, all the list items are marked with **bullets**. It is also known as bulleted list also. The Unordered list starts with `<ul>` tag and list items start with the `<li>` tag.

```
<html>
<body>
<ul>
  <li>ARIES</li>
  <li>BINGO</li>
  <li>LEO</li>
  <li>SCORPIO</li>
</ul>
</body>
</html>
```

- ARIES
- BINGO
- LEO
- SCORPIO

## Types of unordered list

- There can be 4 types of bulleted list:

Type	Description
Type "disc"	This is the default style. In this style, the list items are marked with bullets.
Type "circle"	In this style, the list items are marked with circles.
Type "square"	In this style, the list items are marked with squares.
Type "none"	In this style, the list items are not marked .

### type "disc"

```
<html>
<body>
<ul type="disc">
  <li>HTML</li>
  <li>Java</li>
  <li>JavaScript</li>
  <li>SQL</li>
</ul>
</body>
</html>
```

- HTML
- Java
- JavaScript
- SQL

### type ="circle"

```
<html>
<body>
<ul type="circle">
  <li>HTML</li>
  <li>Java</li>
  <li>JavaScript</li>
  <li>SQL</li>
</ul>
</body>
</html>
```

- HTML
- Java
- JavaScript
- SQL

### type ="square"

```
<html>
<body>
<ul type="square">
  <li>HTML</li>
  <li>Java</li>
  <li>JavaScript</li>
  <li>SQL</li>
</ul>
</body>
</html>
```

- HTML
- Java
- JavaScript
- SQL

type = "none"

```
<html>
<body>
<ul type="none">
  <li>HTML</li>
  <li>Java</li>
  <li>JavaScript</li>
  <li>SQL</li>
</ul>
</body>
</html>
```

HTML  
Java  
JavaScript  
SQL

### Definition Lists/ Description List

- **HTML Description List** or **Definition List** displays elements in **definition** form like in **dictionary**.
- The [<dl>](#) tag in HTML is used to represent the description list. This tag is used with [<dt>](#) and [<dd>](#) tag.
- **Syntax:**  
`<dl> Contents... </dl>`
- To define a definition list we should define:
  - ☐ **<dl>** tag defines the **description list**.
    - It is used to display the list of definitions or descriptions.
  - ☐ **<dt>** tag defines **data term**.
    - It is used to display the definition term.
  - ☐ **<dd>** tag defines **data definition (description)**.
    - It is used to mention the explanation or the definition of the term.

### Example

```
<html>
<body>
<dl>
  <dt>1. HTML</dt>
  <dd>is a markup language</dd>
  <dt>2. Java</dt>
  <dd>is a programming language and platform</dd>
  <dt>3. JavaScript</dt>
  <dd>is a scripting language</dd>
  <dt>4. SQL</dt>
  <dd>is a query language</dd>
</dl>
</body>
</html>
```

1. HTML  
is a markup language
2. Java  
is a programming language and platform
3. JavaScript  
is a scripting language
4. SQL  
is a query language

## Nested List

- A list within another list is termed as **nested list**.

```
<html>
<body>

<h2>A Nested List</h2>

<ol>
  <li>Coffee</li>
  <li>Tea</li>
    <ul>
      <li>Black tea</li>
      <li>Green tea</li>
      <li>Pudina tea</li>
    </ul>

  <li>Milk</li>
    <ul>
      <li>Cow Milk</li>
      <li>Goat Milk</li>
    </ul>

</body>
</html>
```

### A Nested List

- Coffee
- Tea
  - Black tea
  - Green tea
  - Pudina tea
- Milk
  - Cow Milk
  - Goat Milk

## \*Tables - <table>

- A **table** is a collection of information arranged in rows & columns. **HTML <table> tag** is used to display data in tabular form (row \* column).
- We can create a table to display data in tabular form, using **<table> element**, with the help of **<tr>**, **<td>**, and **<th>** elements.
- <tr> tag- table row** is defined by <tr> tag.
- <th> tag - table header** is defined by <th>
- <td> tag- table data** is defined by <td> tag.

Example – A table with 2 rows & 3 columns

```
<table border="1">
<tr>
  <td>Row 1 cell 1</td>
  <td>Row 1 cell2</td>
  <td>Row 1 cell 3</td>
</tr>
<tr>
  <td>Row 2 cell 1</td>
  <td>Row 2 cell2</td>
  <td>Row 2 cell 3</td>
</tr>
```

NAME	SUBJECT	MARKS
Jill	WP	96
Eve	CR	94

```
<html>
<body>

<h2> HTML Table</h2>

<table border="2">
  <tr>
    <th>NAME</th>
    <th>SUBJECT</th>
    <th>MARKS</th>
  </tr>
  <tr>
    <td>Jill</td>
    <td>WP</td>
    <td>96</td>
  </tr>
  <tr>
    <td>Eve</td>
    <td>CR</td>
    <td>94</td>
  </tr>
</table>

</body>
</html>
```

Attributes for <table>

### HTML Table

NAME	SUBJECT	MARKS
Jill	WP	96
Eve	CR	94

- 1. **Border** – used to specify border for the table. Eg: <table border="2">
- 2. **Width & Height**– It specifies the width & height for a single cell.

Eg: <table border = "1">

```
<tr>
  <td width="60" height="100"> CELL 1 </td>
</tr>
```

```
<html>
<head>
<body>
<table border="1">
<tr>
<td width="60" height="100 ">CELL 1</td>
</tr>
</table>
</body>
</html>
```

CELL 1
--------

# <caption> for tables

- It is used to serve as a title or an explanation .
- The **<caption>** tag defines a table caption.
- The **<caption>** tag must be inserted immediately after the **<table>** tag.
- Only one caption can be specified for one table. It is by default aligned to the center.
- **align**: This attribute is used to specify the alignment of text content.

```
<html>
<body>
  <table border ="2">
    <caption><b>STUDENT DETAILS</b></caption>
    <tr>
      <th>Firstname</th>
      <th>Lastname</th>
      <th>Age</th>
    </tr>
    <tr>
      <td>Priya</td>
      <td>Sharma</td>
      <td>24</td>
    </tr>
  </table>
</body>
</html>
```

Firstname	Lastname	Age
Priya	Sharma	24

## \*Spanning of Cells

• **Cell spanning** means joining or merging cells together to make a larger cell.

• **Two Types**

→ Column Spans(colspan) \*

→ Row Spans(rowspan) \*



## Column Span

- The **colspan** attribute defines the number of columns a cell should span.
- It provides the same functionality as “merge cell” in the spreadsheet program like Excel.
- It can be used with **<td>** and **<th>** element while creating an HTML Table.

PROGRAMMING LANGUAGES			MARKUP LANGUAGES	
C	C++	JAVA	HTML	XML

```
<html>
<body>
<h1>THE colspan ATTRIBUTE</h1>
<table border = " 3">
  <tr>
    <th colspan = "3">PROGRAMMING LANGUAGES</th>
    <th colspan= "2"> MARKUP LANGUAGES </th>
  </tr>
  <td> C</td>
  <td> C++</td>
  <td> JAVA</td>
  <td> HTML</td>
  <td> XML</td>
</table>
</body>
</html>
```

### THE colspan ATTRIBUTE

PROGRAMMING LANGUAGES			MARKUP LANGUAGES	
C	C++	JAVA	HTML	XML

## RowSpan

- The rowspan attribute in HTML specifies the number of rows a cell should span.
- It can be used with **<td>** and **<th>** element in an HTML Table.

ITEM	DETAILS
PIZZA	Small
	Medium
	Large

```
<html>
<body>
<h1>The rowspan attribute</h1>

<table border="3">
  <tr>
    <th>ITEM</th>
    <th>DETAILS</th>
  </tr>
  <tr>
    <td rowspan="3">Pizza </td>
    <td> Small</td>
  </tr>
  <tr>
    <td> Medium</td>
  </tr>
  <tr>
    <td> Large</td>
  </tr>
</table>
</body>
</html>
```

### The rowspan attribute

ITEM	DETAILS
Pizza	Small
	Medium
	Large

## Table Alignment

- The **HTML <table> align Attribute** is used to specify the alignment of the table and its content.

- **Syntax:**

`<table align="left | right | center">`

**Attribute Values:**

- **left:** It sets the left align to the table.
- **right:** It sets the right align to the table.
- **center:** It sets the center align to the table.

### Alignment of the text in a cell

- Alignment of the text in a cell can be done using **align** attribute along with **<td>**. It takes the values left,right,center.

**Eg:** `<td align =“right”> Java Programming</td>`

### \* Cell Padding

- Cell Padding is defined as the amount of space held between the **contents of the cell and the cell border**.
- The **cellpadding** attribute is set in terms of pixels.

```
<html>
<body>
<h3> CELL PADDING ATTRIBUTE</h3>

<table cellpadding ="25" border="3">
  <tr>
    <th>ITEM</th>
    <th>DETAILS</th>
  </tr>
  <tr>
    <td>Pizza</td>
    <td> Small</td>
  </tr>
</table>
</body>
</html>
```

CELL PADDING ATTRIBUTE

ITEM	DETAILS
Pizza	Small

## \* Cell Spacing

- Cell spacing is the amount of space held between the cells.
- The cellspacing attribute is set in terms of pixels.

```
<html>
<body>
<h3> CELL PADDING ATTRIBUTE</h3>

<table cellspacing ="25" border="3">
  <tr>
    <th>ITEM</th>
    <th>DETAILS</th>

  </tr>
  <tr>
    <td>Pizza </td>
    <td> Small</td>
  </tr>
</table>
</body>
</html>
```

### CELL PADDING ATTRIBUTE

ITEM	DETAILS
Pizza	Small