HTML5 Markup Continued

4

After completing this lesson, you should be able to:

➢ HTML5 Images

➢ Tables

➢ Lists

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HTML Images

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➢ Images enhance visual appearance of the web pages by making them more interesting and colorful.

➢ The <img> tag is used to insert images in the HTML documents. It is an empty element and contains attributes only. The syntax of the <img> tag can be given with:

```
<img src="url" alt="some_text">
```

- The src attribute tells the browser where to find the image. Its value is the URL of the image file.

- Whereas, the alt attribute provides an alternative text for the image, if it is unavailable or cannot be displayed for some reason. Its value should be a meaningful substitute for the image.

```html
1    <!DOCTYPE html>
2  ∨ <html lang="en">
3  ∨ <head>
4        <title>Placing Images in HTML Documents</title>
5    </head>
6  ∨ <body>
7        <img src="/examples/images/kites.jpg" alt="Flying Kites">
8        <img src="/examples/images/sky.jpg" alt="Cloudy Sky">
9        <img src="/examples/images/balloons.jpg" alt="Hot Air Balloons">
10   </body>
11   </html>
```

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➢ The width and height attributes are used to specify the width and height of an image.

➢ The values of these attributes are interpreted in pixels by default.

```html
1   <!DOCTYPE html>
2   <html lang="en">
3   <head>
4       <title>Setting Image Dimensions in HTML</title>
5   </head>
6   <body>
7       <img src="/examples/images/kites.jpg" alt="Flying Kites" width="300" height="300">
8       <img src="/examples/images/sky.jpg" alt="Cloudy Sky" width="250" height="150">
9       <img src="/examples/images/balloons.jpg" alt="Hot Air Balloons" width="200" height="200">
10  </body>
11  </html>
```

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HTML Tables

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➢ HTML table allows you to arrange data into rows and columns. They are commonly used to display tabular data like product listings, customer's details, financial reports, and so on.

➢ You can create a table using the <table> element. Inside the <table> element, you can use the <tr> elements to create rows, and to create columns inside a row you can use the <td> elements. You can also define a cell as a header for a group of table cells using the <th> element.

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➢ Tables are defined with the <table> tag.

➢ A table is divided into rows (with the <tr> tag), and each row is divided into data cells (with the <td> tag). td stands for "table data," and holds the content of a data cell.

➢ A <td> tag can contain text, links, images, lists, forms, other tables, etc.

HTML Tables

Apples	44%
Bananas	23%
Oranges	13%
Other	10%

- The <TABLE> </TABLE> element has four sub-elements;
  - Table Row <TR></TR>,
  - Table Header <TH></TH>,
  - Table Data <TD> </TD>,
  - Caption <CAPTION> </CAPTION>

- The Table Row elements usually contain Table Header elements or Table Data elements.

- The Table Header and Table Data elements can contain several of the body elements, which allows for rich formatting of the data in the table.

- Tables are used a great deal in the creation of web pages. They allow you to create boundaries that make positioning easier. They are great for formatting forms

```
 1<!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN" "http://www.w3.org/TR/html4/loose.dtd">
 2<html>
 3<head>
 4<meta http-equiv="Content-Type" content="text/html; charset=ISO-8859-1">
 5<title>Insert title here</title>
 6</head>
 7<body>
 8
 9<TABLE BORDER="1">
10    <TR>
11        <TH>Column 1 Header</TH>
12        <TH>Column 2 Header</TH>
13    </TR>
14    <TR>
15        <TD>Row 1 - Col 1</TD>
16        <TD>Row 1 - Col 2</TD>
17    </TR>
18    <TR>
19        <TD>Row 2 - Col 1</TD>
20        <TD>Row 2 - Col 2</TD>
21    </TR>
22    <TR>
23        <TD>Row 3 - Col 1</TD>
24        <TD>Row 3 - Col 2</TD>
25    </TR>
26</TABLE>
27</body>
28</html>
```

Output

Column 1 Header	Column 2 Header
Row 1 - Col 1	Row 1 - Col 2
Row 2 - Col 1	Row 2 - Col 2
Row 3 - Col 1	Row 3 - Col 2

➢ If you do not specify a border attribute, the table will be displayed without borders. Sometimes this can be useful, but most of the time, we want the borders to show.

To display a table with borders, specify the border attribute:

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

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➢ A Table caption allows you to specify a line of text that will appear centered above or below the table. This can act like a title for the table.

```
<TABLE BORDER="1" CELLPADDING="2">
    <CAPTION ALIGN="BOTTOM">Label for my Table</CAPTION>
        <TR>
        . . .
        </TR>
</TABLE>
```

➢ (above the table) or BOTTOM (below the table).

➢ You can use standard character formatting codes inside the CAPTION element.

Column 1 Header	Column 2 Header
Row 1 - Col 1	Row 1 - Col 2
Row 2 - Col 1	Row 2 - Col 2
Row 3 - Col 1	Row 3 - Col 2

Label for my Table

➢ Table Data cells are represented by the TD element. Cells can also be TH (Table Header) elements which results in the contents of the Table.

➢ Header cells appearing centered and in bold text.

➢ If you simply wish to bold the text, we suggest that you insert a B or STRONG element inside the table cell(s) instead of changing the table cell element.

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➢ Header information in a table are defined with the <th> tag.

➢ The text in a th element will be bold and centered.

```
<table border="1">
<tr>
<th>Header 1</th>
<th>Header 2</th>
</tr>
<tr>
<td>row 1, cell 1</td>
<td>row 1, cell 2</td>
</tr>
<tr>
<td>row 2, cell 1</td>
<td>row 2, cell 2</td>
</tr>
</table>
```

How the HTML code above looks in a browser:

Header 1	Header 2
row 1, cell 1	row 1, cell 2
row 2, cell 1	row 2, cell 2

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HTML Table Tags

Tag	Description
<table>	Defines a table
<th>	Defines a table header
<tr>	Defines a table row
<td>	Defines a table cell
<caption>	Defines a table caption
<colgroup>	Defines a group of columns in a table, for formatting
<col />	Defines attribute values for one or more columns in a table
<thead>	Groups the header content in a table
<tbody>	Groups the body content in a table
<tfoot>	Groups the footer content in a table

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➢ **BGColor:**

    – Some browsers support background colors in a table. The color you select will be expressed as a hexadecimal red-green-blue value. You can enter this value directly or you can enter one of the standard Windows color names. (these color names are currently supported only by Microsoft Internet Explorer).

➢ **Width:**

    – You can specify the table width as an absolute number of pixels or a percentage of the document width. The width corresponds to the WIDTH attribute of the TABLE element. You can set the width for table cells as well.

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➢ **Border:**

  – The lines that form the boundary of each table cell when the file is displayed in a browser. You can choose a numerical value for the border width, which specifies the border in pixels, or 'BORDER' (causing the browser to draw the default border). The table border corresponds to the BORDER attribute of the TABLE element. A setting of BORDER="0" will make the border disappear.

➢ **CellSpacing:**

  – Cell Spacing represents the space between cells and is specified in pixels.

➢ **CellPadding:**

  – Cell Padding is the space between the cell border and the cell contents and is specified in pixels.

➤ **Align:**

– Tables can have left, right, or center alignment. The alignment attribute of the **<TABLE>** is not well supported and you will want to use **<DIV>** or **<CENTER>** to control the position of your table in your document.

➤ **Background:**

– Background Image, will be tiled in Internet Explorer 3.0 and above.

➤ **BorderColor:**

– The color of the border around the table. This is supported properly by Navigator 4.0, and Internet Explorer 3.0 and above.

➤ **BorderColorLight:**

– Light color used to outline two sides of a cell or the table, only supported in Internet Explorer 2.0 and above.

➤ **BorderColorDark:**

– Dark color used to outline two sides of a cell or the table, only supported in Internet Explorer 2.0 and above.

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Table Data and Table Header Attributes

➢ **Colspan:**

– Specifies how many cell columns of the table this cell should span.

➢ **Rowspan:**

– Specifies how many cell rows of the table this cell should span.

➢ **Align:**

– cell data can have left, right, or center alignment.

➢ **Valign:**

– cell data can have top, middle, or bottom alignment.

➢ **Background:**

– Background Image, will be tiled in Internet Explorer 3.0 and above.

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➢ **BGColor:**

– Some browsers support background colors. The color you select will be expressed as a hexadecimal red-green-blue value.
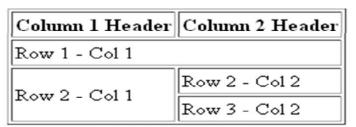
➢ **Width:**

– you can specify the width as an absolute number of pixels or a percentage of the document width.

➢ **Height:**

– you can specify the height as an absolute number of pixels or a percentage of the document height.

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```
1<!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN" "http://www.w3.org/TR/html4/loose.dtd">
2<html>
3<head>
4<meta http-equiv="Content-Type" content="text/html; charset=ISO-8859-1">
5<title>Insert title here</title>
6</head>
7<body>
8
9<TABLE BORDER="1" CELLPADDING="2">
10    <CAPTION ALIGN="BOTTOM">Label for my Table</CAPTION>
11    <TR>
12        <TH>Column 1 Header</TH>
13        <TH>Column 2 Header</TH>
14    </TR>
15    <TR>
16        <TD COLSPAN="2">Row 1 - Col 1</TD>
17    </TR>
18    <TR>
19        <TD ROWSPAN="2">Row 2 - Col 1</TD>
20        <TD>Row 2 - Col 2</TD>
21    </TR>
22    <TR>
23        <TD>Row 3 - Col 2</TD>
24    </TR>
25</TABLE>
26</body>
27</html>
```

Output

Column 1 Header	Column 2 Header
Row 1 - Col 1	
Row 2 - Col 1	Row 2 - Col 2
	Row 3 - Col 2

Label for my Table

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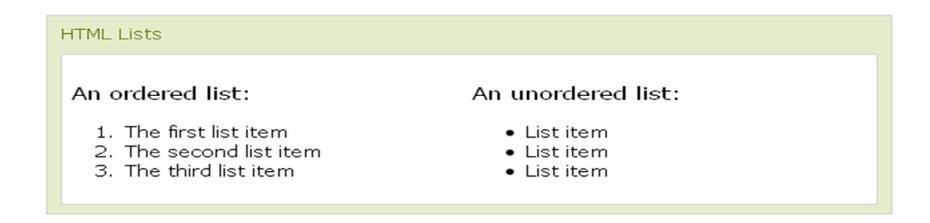
HTML Lists

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HTML lists are used to present list of information in well formed and semantic way. There are three different types of list in HTML and each one has a specific purpose and meaning.

➢ **Unordered list** — Used to create a list of related items, in no particular order.

➢ **Ordered list** — Used to create a list of related items, in a specific order.

➢ **Description list** — Used to create a list of terms and their descriptions.

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➢ HTML supplies several list elements. Most list elements are composed of one or more <LI> (list item) elements.

➢ The most common HTML lists are ordered and unordered lists:

HTML Lists

An ordered list:

1. The first list item
2. The second list item
3. The third list item

An unordered list:

- List item
- List item
- List item

HTML Unordered Lists

➢ An unordered list starts with the <ul> tag. Each list item starts with the <li> tag.

➢ The list items are marked with bullets (typically small black circles).

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```
1   <!DOCTYPE html>
2   <html lang="en">
3   <head>
4       <title>HTML Unordered List</title>
5   </head>
6   <body>
7       <h2>HTML Unordered List</h2>
8       <ul>
9           <li>Chocolate Cake</li>
10          <li>Black Forest Cake</li>
11          <li>Pineapple Cake</li>
12      </ul>
13      <hr>
14      <h2>HTML Nested Unordered List</h2>
15      <ul>
16          <li>Chocolate Cake
17              <ul>
18                  <li>Chocolate Velvet Cake</li>
19                  <li>Chocolate Lava Cake</li>
20              </ul>
21          </li>
22          <li>Black Forest Cake</li>
23          <li>Pineapple Cake</li>
24      </ul>
25  </body>
26  </html>
```

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➢ You have the choice of three bullet types: Disc (default), Circle, Square. These are controlled in Netscape Navigator by the "TYPE" attribute for the <UL> element.

```html
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0 Transitional//EN">
<HTML>
     <HEAD>
          <TITLE>Mentor Labs Limited</TITLE>
     </HEAD>

     <BODY BGCOLOR="#FFFFFF">

          <UL TYPE="SQUARE">
               <LI>JSE</LI>
               <LI>JEE</LI>
               <LI>JME</LI>
          </UL>

     </BODY>
</HTML>
```

Output

- JSE
- JEE
- JME

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➢ An ordered list starts with the <ol> tag. Each list item starts with the <li> tag.

➢ The list items are marked with numbers.

➢ The numbering of items in an ordered list typically starts with 1. However, if you want to change that you can use the start attribute

```
<ol start="10">
    <li>Mix ingredients</li>
    <li>Bake in oven for an hour</li>
    <li>Allow to stand for ten minutes</li>
</ol>
```

```
1    <!DOCTYPE html>
2    <html lang="en">
3    <head>
4        <title>HTML Ordered List</title>
5    </head>
6    <body>
7        <h2>HTML Ordered List</h2>
8        <ol>
9            <li>Fasten your seatbelt</li>
10           <li>Starts the car's engine</li>
11           <li>Look around and go</li>
12       </ol>
13       <hr>
14       <h2>HTML Nested Ordered List</h2>
15       <ol>
16           <li>Fasten your seatbelt</li>
17           <li>Starts the car's engine</li>
18           <li>Look around and go
19               <ol>
20                   <li>Check the blind spot</li>
21                   <li>Check surrounding for safety</li>
22               </ol>
23           </li>
24       </ol>
25   </body>
26   </html>
```

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You have the choice of setting the TYPE Attribute to one of five numbering styles.

TYPE	Numbering Style	
1	Arabic numbers	1, 2, 3, …
a	Lower alpha	a, b, c, …
A	Upper alpha	A, B, C, …
i	Lower roman	i, ii, iii, …
I	Upper roman	I, II, III, …

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➢ A definition list is a list of items, with a description of each item.

➢ The <dl> tag defines a definition list.

➢ The <dl> tag is used in conjunction with <dt> (defines the item in the list) and <dd> (describes the item in the list):

```
<dl>
    <dt>Bread</dt>
    <dd>A baked food made of flour.</dd>
    <dt>Coffee</dt>
    <dd>A drink made from roasted coffee beans.</dd>
</dl>
```

- Tip: Inside a list item you can put text, line breaks, images, links, other lists, etc.

So Use it

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List Tags

HTML List Tags

Tag	Description
	Defines an ordered list
	Defines an unordered list
	Defines a list item
<dl>	Defines a definition list
<dt>	Defines an item in a definition list
<dd>	Defines a description of an item in a definition list

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In this lesson, you should have learned how to:

➢ HTML5 Images

➢ Tables

➢ Lists