

HTML TABLES & LISTS

Computer-Human Interaction

HTML TABLE

HTML Table Example

Company	Contact	Country
Alfreds Futterkiste	Maria Anders	Germany
Centro comercial Moctezuma	Francisco Chang	Mexico
Ernst Handel	Roland Mendel	Austria
Island Trading	Helen Bennett	UK
Laughing Bacchus Winecellars	Yoshi Tannamuri	Canada
Magazzini Alimentari Riuniti	Giovanni Rovelli	Italy

HTML TABLE

- An HTML table is defined with the <table> tag.
- Each table row is defined with the <tr> tag. A table header is defined with the <th> tag. By default, table headings are bold and centered. A table data/cell is defined with the <td> tag.
- Note: The <td> elements are the data containers of the table.
- They can contain all sorts of HTML elements; text, images, lists, other tables, etc.

Example

```
<table style="width:100%">
  <tr>
    <th>Firstname</th>
    <th>Lastname</th>
    <th>Age</th>
  </tr>
  <tr>
    <td>Jill</td>
    <td>Smith</td>
    <td>50</td>
  </tr>
  <tr>
    <td>Eve</td>
    <td>Jackson</td>
    <td>94</td>
  </tr>
</table>
```

ADDING A BORDER

- If you do not specify a border for the table, it will be displayed without borders.
- A border is set using the CSS border property:

Example

```
table, th, td {  
  border: 1px solid black;  
}
```

COLLAPSED BORDERS

If you want the borders to collapse into one border, add the CSS border-collapse property:

Example

```
table, th, td {  
  border: 1px solid black;  
  border-collapse: collapse;  
}
```

ADDING A BORDER

```
table, th, td {  
  border: 1px solid black;  
}
```

Bordered Table

Use the CSS border property to add a border to the table.

Firstname	Lastname	Age
Jill	Smith	50
Eve	Jackson	94
John	Doe	80

```
<!DOCTYPE html>  
<html>  
<head>
```

```
<link rel="stylesheet" href="styles.css">
```

```
</head>  
<body>
```

```
<h2>Bordered Table</h2>
```

```
<p>Use the CSS border property to add a border to the table.</p>
```

```
<table style="width:100%">
```

```
<tr>
```

```
<th>Firstname</th>
```

```
<th>Lastname</th>
```

```
<th>Age</th>
```

```
</tr>
```

```
<tr>
```

```
<td>Jill</td>
```

```
<td>Smith</td>
```

```
<td>50</td>
```

```
</tr>
```

```
<tr>
```

```
<td>Eve</td>
```

```
<td>Jackson</td>
```

```
<td>94</td>
```

```
</tr>
```

```
<tr>
```

```
<td>John</td>
```

```
<td>Doe</td>
```

```
<td>80</td>
```

```
</tr>
```

```
</table>
```

```
</body>  
</html>
```

COLLAPSED BORDERS

```
<!DOCTYPE html>
<html>
<head>
```

```
<link rel="stylesheet" href="styles.css">
```

```
</head>
<body>
```

```
<h2>Collapsed Borders</h2>
```

```
<p>If you want the borders to collapse into one border, add the CSS border-collapse property.</p>
```

```
<table style="width:100%">
```

```
<tr>
```

```
<th>Firstname</th>
```

```
<th>Lastname</th>
```

```
<th>Age</th>
```

```
</tr>
```

```
<tr>
```

```
<td>Jill</td>
```

```
<td>Smith</td>
```

```
<td>50</td>
```

```
</tr>
```

```
<tr>
```

```
<td>Eve</td>
```

```
<td>Jackson</td>
```

```
<td>94</td>
```

```
</tr>
```

```
<tr>
```

```
<td>John</td>
```

```
<td>Doe</td>
```

```
<td>80</td>
```

```
</tr>
```

```
</table>
```

```
</body>
```

```
</html>
```

```
table, th, td {
  border: 1px solid black;
  border-collapse: collapse;
}
```

Collapsed Borders

If you want the borders to collapse into one border, add the CSS border-collapse property.

Firstname	Lastname	Age
Jill	Smith	50
Eve	Jackson	94
John	Doe	80

Adding Cell Padding

Left-align Headings

Adding Border Spacing

Example

```
th {  
  text-align: left;  
}
```

Example

```
th, td {  
  padding: 15px;  
}
```

Example

```
table {  
  border-spacing: 5px;  
}
```

CELLS THAT SPAN MANY | COLUMNS

Example

```
<table style="width:100%">
  <tr>
    <th>Name</th>
    <th colspan="2">Telephone</th>
  </tr>
  <tr>
    <td>Bill Gates</td>
    <td>55577854</td>
    <td>55577855</td>
  </tr>
</table>
```

| ROWS

Example

```
<table style="width:100%">
  <tr>
    <th>Name:</th>
    <td>Bill Gates</td>
  </tr>
  <tr>
    <th rowspan="2">Telephone:</th>
    <td>55577854</td>
  </tr>
  <tr>
    <td>55577855</td>
  </tr>
</table>
```


CELLS THAT SPAN MANY | COLUMNS

To make a cell span more than one column, use the `colspan` attribute.

Name	Telephone	
Bill Gates	55577854	55577855

CELLS THAT SPAN MANY | ROWS

To make a cell span more than one row, use the `rowspan` attribute.

Name:	Bill Gates
Telephone:	55577854
	55577855

ADDING A CAPTION

```
table, th, td {  
  border: 1px solid black;  
  border-collapse: collapse;  
}  
th, td {  
  padding: 5px;  
  text-align: left;  
}
```

Table Caption

To add a caption to a table, use the caption tag.

Monthly savings

Month	Savings
January	\$100
February	\$50

```
<!DOCTYPE html>  
<html>  
<head>
```

```
<link rel="stylesheet" href="styles.css">
```

```
</head>  
<body>
```

```
<h2>Table Caption</h2>
```

```
<p>To add a caption to a table, use the caption tag.</p>
```

```
<table style="width:100%">
```

```
<caption>Monthly savings</caption>
```

```
<tr>
```

```
<th>Month</th>
```

```
<th>Savings</th>
```

```
</tr>
```

```
<tr>
```

```
<td>January</td>
```

```
<td>$100</td>
```

```
</tr>
```

```
<tr>
```

```
<td>February</td>
```

```
<td>$50</td>
```

```
</tr>
```

```
</table>
```

```
</body>  
</html>
```

A SPECIAL STYLE FOR ONE TABLE

Example

```
<table id="t01">
  <tr>
    <th>Firstname</th>
    <th>Lastname</th>
    <th>Age</th>
  </tr>
  <tr>
    <td>Eve</td>
    <td>Jackson</td>
    <td>94</td>
  </tr>
</table>
```

```
table#t01 {
  width: 100%;
  background-color: #f1f1c1;
}
```

And add more styles:

```
table#t01 tr:nth-child(even) {
  background-color: #eee;
}
table#t01 tr:nth-child(odd) {
  background-color: #fff;
}
table#t01 th {
  color: white;
  background-color: black;
}
```

Styling Tables

Firstname	Lastname	Age
Jill	Smith	50
Eve	Jackson	94
John	Doe	80

Firstname	Lastname	Age
Jill	Smith	50
Eve	Jackson	94
John	Doe	80

Firstname	Lastname	Age
Jill	Smith	50
Eve	Jackson	94
John	Doe	80

CHAPTER SUMMARY

- Use the HTML `<table>` element to define a table
- Use the HTML `<tr>` element to define a table row
- Use the HTML `<td>` element to define a table data
- Use the HTML `<th>` element to define a table heading
- Use the HTML `<caption>` element to define a table caption
- Use the CSS `border` property to define a border
- Use the CSS `border-collapse` property to collapse cell borders
- Use the CSS `padding` property to add padding to cells
- Use the CSS `text-align` property to align cell text
- Use the CSS `border-spacing` property to set the spacing between cells
- Use the `colspan` attribute to make a cell span many columns
- Use the `rowspan` attribute to make a cell span many rows
- Use the `id` attribute to uniquely define one table

HTML TABLE TAGS

Tag	Description
<u><table></u>	Defines a table
<u><th></u>	Defines a header cell in a table
<u><tr></u>	Defines a row in a table
<u><td></u>	Defines a cell in a table
<u><caption></u>	Defines a table caption
<u><colgroup></u>	Specifies a group of one or more columns in a table for formatting
<u><col></u>	Specifies column properties for each column within a <colgroup> element
<u><thead></u>	Groups the header content in a table
<u><tbody></u>	Groups the body content in a table
<u><tfoot></u>	Groups the footer content in a table

TRY THIS

Name	Age	Occupation	Location
Luke Peters	25	Freelance Web Developer	Brookline, MA
Joseph Smith	27	Project Manager	Somerville, MA
Maxwell Johnson	26	UX Architect & Designer	Arlington, MA
Harry Hamson	25	Front-End Developer	Boston, MA

Product	Unit Price	Quantity	Date Sold	Status
Solid oak work table	\$800	10	03/15/2014	Waiting for Pickup
Leather iPhone wallet	\$45	120	02/28/2014	In Transit
27" Apple Thunderbolt displays	\$1000	25	02/10/2014	Delivered
Bose studio headphones	\$60	90	01/14/2014	Delivered

Username	Email	Password	Active
ninja1ug	misterninja@hotmail.com	*****	Yes
jsmith41	joseph.smith@gmail.com	*****	No
1337hax0r15	hackerdude1000@aol.com	*****	Yes
hairyharry19	harryharry@gmail.com	*****	Yes

HTML LISTS

HTML LISTS

HTML List Example

An Unordered List:

- Item
- Item
- Item
- Item

An Ordered List:

1. First item
2. Second item
3. Third item
4. Fourth item

- 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
1. An ordered list starts with the `` tag. Each list item starts with the `` tag.
 2. The list items will be marked with numbers by default:

UNORDERED HTML 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>
```

Example - Circle

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

Example - Square

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

Example - None

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

UNORDERED HTML LIST – CHOOSE LIST ITEM MARKER

Unordered List with Disc Bullets

- Coffee
- Tea
- Milk

Unordered List with Square Bullets

- Coffee
- Tea
- Milk

Unordered List with Circle Bullets

- Coffee
- Tea
- Milk

Unordered List without Bullets

Coffee
Tea
Milk

ORDERED HTML LIST – 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

Numbers:

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

Uppercase Letters:

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

Lowercase Letters:

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

Lowercase Roman Numbers:

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

Uppercase Roman Numbers:

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

ORDERED HTML LIST – THE TYPE ATTRIBUTE

Ordered List with Numbers

1. Coffee
2. Tea
3. Milk

Ordered List with Letters

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

Ordered List with Lowercase Letters

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

Ordered List with Roman Numbers

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

Ordered List with Lowercase Roman Numbers

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

HTML DESCRIPTION LISTS

- HTML also supports 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:

Example

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

HTML DESCRIPTION LISTS

```
<!DOCTYPE html>
<html>
<body>

<h2>A Description List</h2>

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

</body>
</html>
```

A Description List

Coffee
- black hot drink

Milk
- white cold drink

NESTED HTML LISTS

```
<!DOCTYPE html>
<html>
<body>

<h2>A Nested List</h2>
<p>List can be nested (lists inside lists):</p>

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

</body>
</html>
```

A Nested List

List can be nested (lists inside lists):

- Coffee
- Tea
 - Black tea
 - Green tea
- Milk

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

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:

```
<!DOCTYPE html>
<html>
<body>

<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>

</body>
</html>
```

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

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

HORIZONTAL LIST WITH CSS

```
<!DOCTYPE html>
<html>
<head>
</head>
<body>

<ul>
  <li><a href="#home">Home</a></li>
  <li><a href="#news">News</a></li>
  <li><a href="#contact">Contact</a></li>
  <li><a href="#about">About</a></li>
</ul>

</body>
</html>
```



Home News Contact About

```
ul {
  list-style-type: none;
  margin: 0;
  padding: 0;
  overflow: hidden;
  background-color: #333333;
}

li {
  float: left;
}

li a {
  display: block;
  color: white;
  text-align: center;
  padding: 16px;
  text-decoration: none;
}

li a:hover {
  background-color: #111111;
}
```

CHAPTER SUMMARY

- Use the HTML `` element to define an unordered list
- Use the CSS `list-style-type` property to define the list item marker
- Use the HTML `` element to define an ordered list
- Use the HTML `type` attribute to define the numbering type
- Use the HTML `` element to define a list item
- Use the HTML `<dl>` element to define a description list
- Use the HTML `<dt>` element to define the description term
- Use the HTML `<dd>` element to describe the term in a description list
- Lists can be nested inside lists
- List items can contain other HTML elements
- Use the CSS property `float:left` or `display:inline` to display a list horizontally