HTML Table

**HTML table tag** is used to display data in tabular form (row \* column). There can be many columns in a row.

We can create a table to display data in tabular form, using <table> element, with the help of <tr> , <td>, and <th> elements.

In Each table, table row is defined by <tr> tag, table header is defined by <th>, and table data is defined by <td> tags.

HTML tables are used to manage the layout of the page e.g. header section, navigation bar, body content, footer section etc. But it is recommended to use div tag over table to manage the layout of the page .

## **HTML Table Tags**

|  |  |
| --- | --- |
| **Tag** | **Description** |
| <table> | It defines a table. |
| <tr> | It defines a row in a table. |
| <th> | It defines a header cell in a table. |
| <td> | It defines a cell in a table. |
| <caption> | It defines the table caption. |
| <colgroup> | It specifies a group of one or more columns in a table for formatting. |
| <col> | It is used with <colgroup> element to specify column properties for each column. |
| <tbody> | It is used to group the body content in a table. |
| <thead> | It is used to group the header content in a table. |
| <tfooter> | It is used to group the footer content in a table. |

## **HTML Table Example**

Let's see the example of HTML table tag. It output is shown above.

1. **<table>**
2. **<tr><th>**First\_Name**</th><th>**Last\_Name**</th><th>**Marks**</th></tr>**
3. **<tr><td>**Sonoo**</td><td>**Jaiswal**</td><td>**60**</td></tr>**
4. **<tr><td>**James**</td><td>**William**</td><td>**80**</td></tr>**
5. **<tr><td>**Swati**</td><td>**Sironi**</td><td>**82**</td></tr>**
6. **<tr><td>**Chetna**</td><td>**Singh**</td><td>**72**</td></tr>**
7. **</table>**

|  |  |  |
| --- | --- | --- |
| **First\_Name** | **Last\_Name** | **Marks** |
| Sonoo | Jaiswal | 60 |
| James | William | 80 |
| Swati | Sironi | 82 |
| Chetna | Singh | 72 |

# CSS Tables

## **Table Borders**

To specify table borders in CSS, use the border property.

The example below specifies a solid border for <table>, <th>, and <td> eleme

.

1. By border attribute of table in HTML
2. By border property in CSS

## **1) HTML Border attribute**

You can use border attribute of table tag in HTML to specify border. But it is not recommended now.

1. **<table** border="1"**>**
2. **<tr><th>**First\_Name**</th><th>**Last\_Name**</th><th>**Marks**</th></tr>**
3. **<tr><td>**Sonoo**</td><td>**Jaiswal**</td><td>**60**</td></tr>**
4. **<tr><td>**James**</td><td>**William**</td><td>**80**</td></tr>**
5. **<tr><td>**Swati**</td><td>**Sironi**</td><td>**82**</td></tr>**
6. **<tr><td>**Chetna**</td><td>**Singh**</td><td>**72**</td></tr>**
7. **</table>**

|  |  |  |
| --- | --- | --- |
| **First\_Name** | **Last\_Name** | **Marks** |
| Sonoo | Jaiswal | 60 |
| James | William | 80 |
| Swati | Sironi | 82 |
| Chetna | Singh | 72 |

<!DOCTYPE>

<html>

<head>

<style>

table, th, td {

border: 1px solid black;

}

</style>

</head>

<body>

<table>

<tr><th>First\_Name</th><th>Last\_Name</th><th>Marks</th></tr>

<tr><td>Sonoo</td><td>Jaiswal</td><td>60</td></tr>

<tr><td>James</td><td>William</td><td>80</td></tr>

<tr><td>Swati</td><td>Sironi</td><td>82</td></tr>

<tr><td>Chetna</td><td>Singh</td><td>72</td></tr>

</table>

</body>

</html>

|  |  |  |
| --- | --- | --- |
| **First\_Name** | **Last\_Name** | **Marks** |
| Sonoo | Jaiswal | 60 |
| James | William | 80 |
| Swati | Sironi | 82 |
| Chetna | Singh | 72 |

## **Full-Width Table**

The table above might seem small in some cases. If you need a table that should span the entire screen (full-width), add width: 100% to the <table> element:

table {

width: 100%;

}

</style>

</head>

<body>

<h2>Full-width Table</h2>

<table>

<tr>

<th>Firstname</th>

<th>Lastname</th>

</tr>

<tr>

<td>Pvvvvter</td>

<td>vv</td>

</tr>

<tr>

<td>Lssss</td>

<td>sssssfin</td>

</tr>

</table>

</body>

</html>

## **Collapse Table Borders**

The border-collapse property sets whether the table borders should be collapsed into a single border:

<!DOCTYPE>

<html>

<head>

<style>

table, th, td {

border: 1px solid black;

border-collapse: collapse;

}

</style>

</head>

<body>

<table>

<tr><th>First\_Name</th><th>Last\_Name</th><th>Marks</th></tr>

<tr><td>Sonoo</td><td>Jaiswal</td><td>60</td></tr>

<tr><td>James</td><td>William</td><td>80</td></tr>

<tr><td>Swati</td><td>Sironi</td><td>82</td></tr>

<tr><td>Chetna</td><td>Singh</td><td>72</td></tr>

</table>

</body>

</html>

|  |  |  |
| --- | --- | --- |
| **First\_Name** | **Last\_Name** | **Marks** |
| Sonoo | Jaiswal | 60 |
| James | William | 80 |
| Swati | Sironi | 82 |
| Chetna | Singh | 72 |

## **HTML Table with cell padding**

You can specify padding for table header and table data by two ways:

1. By cellpadding attribute of table in HTML
2. By padding property in CSS

The cellpadding attribute of HTML table tag is obselete now. It is recommended to use CSS. So let's see the code of CSS.

<!DOCTYPE>

<html>

<head>

<style>

table, th, td {

border: 1px solid black;

border-collapse: collapse;

}

th, td {

padding: 10px;

}

</style>

</head>

<body>

<table>

<tr><th>First\_Name</th><th>Last\_Name</th><th>Marks</th></tr>

<tr><td>Sonoo</td><td>Jaiswal</td><td>60</td></tr>

<tr><td>James</td><td>William</td><td>80</td></tr>

<tr><td>Swati</td><td>Sironi</td><td>82</td></tr>

<tr><td>Chetna</td><td>Singh</td><td>72</td></tr>

</table>

</body>

</html>

|  |  |  |
| --- | --- | --- |
| **First\_Name** | **Last\_Name** | **Marks** |
| Sonoo | Jaiswal | 60 |
| James | William | 80 |
| Swati | Sironi | 82 |
| Chetna | Singh | 72 |

# CSS Table Size

## **Table Width and Height**

The width and height of a table are defined by the width and height properties.

The example below sets the width of the table to 100%, and the height of the <th> elements to 70px:

table {  
  width: 100%;  
}  
  
th {  
  height: 70px;  
}

<!DOCTYPE html>

<html>

<head>

<style>

table, th, td {

border: 1px solid;

}

table {

width: 100%;

}

</style>

</head>

<body>

<h2>Full-width Table</h2>

<table>

<tr>

<th>1 header</th>

<th>1 header</th>

<th>1 header</th>

</tr>

<tr>

<td>1data</td>

<td>1data</td>

<td>1data</td>

</tr>

<tr>

<td>1data</td>

<td>1data</td>

<td>1data</td>

</tr>

</table>

</body>

</html>

## Full-width Table

|  |  |  |
| --- | --- | --- |
| **1 header** | **1 header** | **1 header** |
| 1data | 1data | 1data |
| 1data | 1data | 1data |

<!DOCTYPE html>

<html>

<head>

<style>

table, td, th {

border: 1px solid black;

}

table {

border-collapse: collapse;

width: 100%;

}

th {

height: 70px;

}

</style>

</head>

<body>

<h2>The width and height Properties</h2>

<p>Set the width of the table, and the height of the table header row:</p>

<table>

<tr>

<th>1 header</th>

<th>1 header</th>

<th>1 header</th>

</tr>

<tr>

<td>1data</td>

<td>1data</td>

<td>1data</td>

</tr>

<tr>

<td>2 data</td>

<td>2 data</td>

<td>2 data</td>

</tr>

</table>

</body>

</html>

## The width and height Properties

Set the width of the table, and the height of the table header row:

|  |  |  |
| --- | --- | --- |
| **1 header** | **1 header** | **1 header** |
| 1data | 1data | 1data |
| 2 data | 2 data | 2 data |

# CSS Table Alignment

## **Horizontal Alignment**

The text-align property sets the horizontal alignment (like left, right, or center) of the content in <th> or <td>.

By default, the content of <th> elements are center-aligned and the content of <td> elements are left-aligned.

To center-align the content of  <td> elements as well, use text-align: center:

<!DOCTYPE html>

<html>

<head>

<style>

table, td, th {

border: 1px solid black;

}

table {

border-collapse: collapse;

width: 100%;

}

td {

// text-align: center;

text-align: left;

}

</style>

</head>

<body>

<h2>The text-align Property</h2>

<p>This property sets the horizontal alignment (like left, right, or center) of the content in th or td.</p>

<table>

<tr>

<th>1 header</th>

<th>1 header</th>

<th>1 header</th>

</tr>

<tr>

<td>1data</td>

<td>1data</td>

<td>1data</td>

</tr>

<tr>

<td>2 data</td>

<td>2 data</td>

<td>2 data</td>

</tr>

<tr>

<td>3 data</td>

<td>3 data</td>

<td>3 data</td>

</tr>

</table>

</body>

</html>

## The text-align Property

This property sets the horizontal alignment (like left, right, or center) of the content in th or td.

|  |  |  |
| --- | --- | --- |
| **1 header** | **1 header** | **1 header** |
| 1data | 1data | 1data |
| 2 data | 2 data | 2 data |
| 3 data | 3 data | 3 data |

## **Vertical Alignment**

The vertical-align property sets the vertical alignment (like top, bottom, or middle) of the content in <th> or <td>.

By default, the vertical alignment of the content in a table is middle (for both <th> and <td> elements).

The following example sets the vertical text alignment to bottom for <td> elements:

<!DOCTYPE html>

<html>

<head>

<style>

table, td, th {

border: 1px solid black;

}

table {

border-collapse: collapse;

width: 100%;

}

td {

height: 50px;

vertical-align: bottom;

}

</style>

</head>

<body>

<h2>The vertical-align Property</h2>

<p>This property sets the vertical alignment (like top, bottom, or middle) of the content in th or td.</p>

<table>

<tr>

<th>1 header</th>

<th>1 header</th>

<th>1 header</th>

</tr>

<tr>

<td>1data</td>

<td>1data</td>

<td>1data</td>

</tr>

<tr>

<td>2 data</td>

<td>2 data</td>

<td>2 data</td>

</tr>

<tr>

<td>3 data</td>

<td>3 data</td>

<td>3 data</td>

</tr>

</table>

</body>

</html>

## The vertical-align Property

This property sets the vertical alignment (like top, bottom, or middle) of the content in th or td.

|  |  |  |
| --- | --- | --- |
| **1 header** | **1 header** | **1 header** |
| 1data | 1data | 1data |
| 2 data | 2 data | 2 data |
| 3 data | 3 data | 3 data |

# CSS Table Style

## **Table Padding**

To control the space between the border and the content in a table, use the padding property on <td> and <th> elements:

<!DOCTYPE html>

<html>

<head>

<style>

table, td, th {

border: 1px solid #ddd;

text-align: left;

}

table {

border-collapse: collapse;

width: 100%;

}

th, td {

padding: 15px;

}

</style>

</head>

<body>

<h2>The padding Property</h2>

<p>This property adds space between the border and the content in a table.</p>

<table>

<tr>

<th>1 header</th>

<th>1 header</th>

<th>1 header</th>

</tr>

<tr>

<td>1data</td>

<td>1data</td>

<td>1data</td>

</tr>

<tr>

<td>2 data</td>

<td>2 data</td>

<td>2 data</td>

</tr>

<tr>

<td>3 data</td>

<td>3 data</td>

<td>3 data</td>

</tr>

</table>

</body>

</html>

## The padding Property

This property adds space between the border and the content in a table.

|  |  |  |
| --- | --- | --- |
| **1 header** | **1 header** | **1 header** |
| 1data | 1data | 1data |
| 2 data | 2 data | 2 data |
| 3 data | 3 data | 3 data |

## **Horizontal Dividers**

<!DOCTYPE html>

<html>

<head>

<style>

table {

border-collapse: collapse;

width: 100%;

}

th, td {

padding: 8px;

text-align: left;

border-bottom: 1px solid #ddd;

}

</style>

</head>

<body>

<h2>Bordered Table Dividers</h2>

<p>Add the border-bottom property to th and td for horizontal dividers:</p>

<table>

<tr>

<th>1 header</th>

<th>1 header</th>

<th>1 header</th>

</tr>

<tr>

<td>1data</td>

<td>1data</td>

<td>1data</td>

</tr>

<tr>

<td>2 data</td>

<td>2 data</td>

<td>2 data</td>

</tr>

<tr>

<td>3 data</td>

<td>3 data</td>

<td>3 data</td>

</tr>

</table>

</body>

</html>

## Bordered Table Dividers

Add the border-bottom property to th and td for horizontal dividers:

|  |  |  |
| --- | --- | --- |
| **1 header** | **1 header** | **1 header** |
| 1data | 1data | 1data |
| 2 data | 2 data | 2 data |
| 3 data | 3 data | 3 data |

## **Hoverable Table**

Use the :hover selector on <tr> to highlight table rows on mouse over

<!DOCTYPE html>

<html>

<head>

<style>

table {

border-collapse: collapse;

width: 100%;

}

th, td {

padding: 8px;

text-align: left;

border-bottom: 1px solid #ddd;

}

tr:hover {background-color: coral;}

</style>

</head>

<body>

<h2>Hoverable Table</h2>

<p>Move the mouse over the table rows to see the effect.</p>

<table>

<tr>

<th>1 header</th>

<th>1 header</th>

<th>1 header</th>

</tr>

<tr>

<td>1data</td>

<td>1data</td>

<td>1data</td>

</tr>

<tr>

<td>2 data</td>

<td>2 data</td>

<td>2 data</td>

</tr>

<tr>

<td>3 data</td>

<td>3 data</td>

<td>3 data</td>

</tr>

</table>

</body>

</html>

## **Striped Tables**

For zebra-striped tables, use the nth-child() selector and add a background-color to all even (or odd) table rows:

<!DOCTYPE html>

<html>

<head>

<style>

table {

border-collapse: collapse;

width: 100%;

}

th, td {

text-align: left;

padding: 8px;

}

tr:nth-child(even) {background-color: #f2f2f2;}

</style>

</head>

<body>

<h2>Striped Table</h2>

<p>For zebra-striped tables, use the nth-child() selector and add a background-color to all even (or odd) table rows:</p>

<table>

<tr>

<th>1 header</th>

<th>1 header</th>

<th>1 header</th>

</tr>

<tr>

<td>1data</td>

<td>1data</td>

<td>1data</td>

</tr>

<tr>

<td>2 data</td>

<td>2 data</td>

<td>2 data</td>

</tr>

<tr>

<td>3 data</td>

<td>3 data</td>

<td>3 data</td>

</tr>

</table>

</body>

</html>

## Striped Table

For zebra-striped tables, use the nth-child() selector and add a background-color to all even (or odd) table rows:

|  |  |  |
| --- | --- | --- |
| **1 header** | **1 header** | **1 header** |
| 1data | 1data | 1data |
| 2 data | 2 data | 2 data |
| 3 data | 3 data | 3 data |

## **Table Color**

<!DOCTYPE html>

<html>

<head>

<style>

table {

border-collapse: collapse;

width: 100%;

}

th, td {

text-align: left;

padding: 8px;

}

tr:nth-child(even){background-color: #f2f2f2}

th {

background-color: #04AA6D;

color: white;

}

</style>

</head>

<body>

<h2>Colored Table Header</h2>

<table>

<tr>

<th>1 header</th>

<th>1 header</th>

<th>1 header</th>

</tr>

<tr>

<td>1data</td>

<td>1data</td>

<td>1data</td>

</tr>

<tr>

<td>2 data</td>

<td>2 data</td>

<td>2 data</td>

</tr>

<tr>

<td>3 data</td>

<td>3 data</td>

<td>3 data</td>

</tr>

</table>

</body>

</html>

## Colored Table Header

|  |  |  |
| --- | --- | --- |
| **1 header** | **1 header** | **1 header** |
| 1data | 1data | 1data |
| 2 data | 2 data | 2 data |
| 3 data | 3 data | 3 data |

<!DOCTYPE html>

<html>

<head>

<style>

table {

border-collapse: collapse;

width: 100%;

}

th, td {

text-align: left;

padding: 8px;

}

tr:nth-child(even) {background-color: #f2f2f2;}

</style>

</head>

<body>

<h2>Responsive Table</h2>

<p>A responsive table will display a horizontal scroll bar if the screen is too

small to display the full content. Resize the browser window to see the effect:</p>

<p>To create a responsive table, add a container element (like div) with <strong>overflow-x:auto</strong> around the table element:</p>

<div style="overflow-x: auto;">

<table>

<tr>

<th>First Name</th>

<th>Last Name</th>

<th>Points</th>

<th>Points</th>

<th>Points</th>

<th>Points</th>

<th>Points</th>

<th>Points</th>

<th>Points</th>

<th>Points</th>

<th>Points</th>

<th>Points</th>

</tr>

<tr>

<td>Jill</td>

<td>Smith</td>

<td>50</td>

<td>50</td>

<td>50</td>

<td>50</td>

<td>50</td>

<td>50</td>

<td>50</td>

<td>50</td>

<td>50</td>

<td>50</td>

</tr>

<tr>

<td>Eve</td>

<td>Jackson</td>

<td>94</td>

<td>94</td>

<td>94</td>

<td>94</td>

<td>94</td>

<td>94</td>

<td>94</td>

<td>94</td>

<td>94</td>

<td>94</td>

</tr>

<tr>

<td>Adam</td>

<td>Johnson</td>

<td>67</td>

<td>67</td>

<td>67</td>

<td>67</td>

<td>67</td>

<td>67</td>

<td>67</td>

<td>67</td>

<td>67</td>

<td>67</td>

</tr>

</table>

</div>

</body>

</html>

## Responsive Table

A responsive table will display a horizontal scroll bar if the screen is too small to display the full content. Resize the browser window to see the effect:

To create a responsive table, add a container element (like div) with **overflow-x:auto** around the table element:

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **First Name** | **Last Name** | **Points** | **Points** | **Points** | **Points** | **Points** | **Points** | **Points** | **Points** | **Points** | **Points** |
| Jill | Smith | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 |
| Eve | Jackson | 94 | 94 | 94 | 94 | 94 | 94 | 94 | 94 | 94 | 94 |
| Adam | Johnson | 67 | 67 | 67 | 67 | 67 | 67 | 67 | 67 | 67 | 67 |