

TECHNOLOGY



Coding Bootcamp

TECHNOLOGY



HTML

Tables in HTML



Learning Objectives

By the end of this lesson, you will be able to:

- 🕒 Analyze the importance of using tables and table tag in HTML for content organization
- 🕒 Identify the syntax of caption in a table for creating usable and meaningful web content
- 🕒 Grasp the concept of merging cells and text wrapping for creating effective, user-friendly, and accessible HTML tables
- 🕒 Define the usage of cell alignment for improving readability, enhancing user experience



Table Tag

Table Tag

The `<table>` tag is a fundamental HTML element used for displaying data in a structured and tabular format.

Tag	Description

Header: `<th>`

Row: `<tr>`

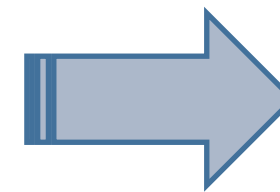
Cells: `<td>`

`<td>` tag can hold a variety of HTML elements other than text.

Table Tag

Example: A table containing student details:

```
<!DOCTYPE html>
<html>
<style>
table, th, td {
border:1px solid black;      }
</style>
<body>
<h3>Student Details</h3>
<table style="width:50%">
  <tr>
    <th>Name</th>
    <th>Class</th>
    <th>Roll No</th>  </tr>
  <tr>
    <th>John</th>
    <th>XII</th>
    <th>24</th>  </tr>
</table></body> </html>
```



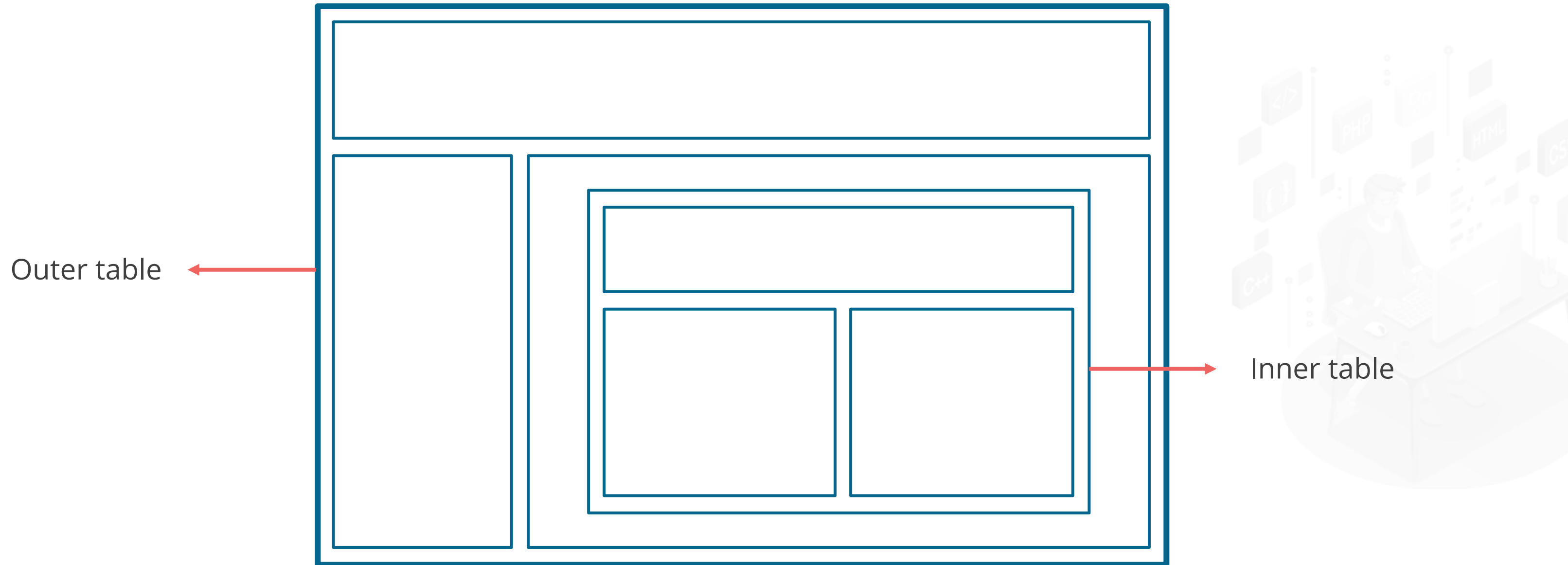
Output

Student Details

Name	Class	Roll No
John	XII	24

Table Tag

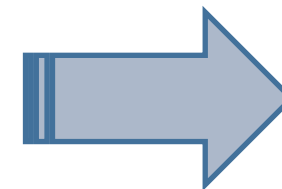
The <table> tag is a versatile tool in HTML for organizing content into rows and columns.



To create a nested table, you can build a table with the <table> tag.

Table Tag: Example

```
<!DOCTYPE html>
<html>
<body>
<table border="2" bordercolor="green">
<tr>
<td>Table 1</td>
<td> Table 1
<table border="2" bordercolor="blue"> <tr>
<td>Table 2</td>
<td>Table 2</td></tr>
<tr>
<td>Table 2</td>
<td>Table 2</td></tr></table></td></tr>
<tr>
<td>Table 2</td>
<td>Table 2</td></tr></table></td></tr>
<tr>
<td> Table 1 </td>
<td> Table 1 </td>
</tr></table></body></html>
```



Output

	Table 1				
Table 1	<table><tr><td>Table 2</td><td>Table 2</td></tr><tr><td>Table 2</td><td>Table 2</td></tr></table>	Table 2	Table 2	Table 2	Table 2
Table 2	Table 2				
Table 2	Table 2				
Table 1	Table 1				

Table Background Color

Table Background Color

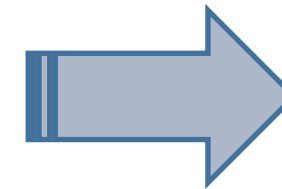
In HTML, you can set the background color of a table and its individual cells using the style attribute with Cascading Style Sheets (CSS) properties.

Below is a table with various background colors applied to different parts of the table:

Tag	Description

Table Background Color: Example

```
<table style="background-color:#FABEE0;">
<tr>
<th>Header</th><th>Header</th>
</tr>
<tr>
<td>Onida</td><td>BPL</td>
</tr>
<tr>
<td>LG</td><td>Samsung</td>
</tr>
</table>
```



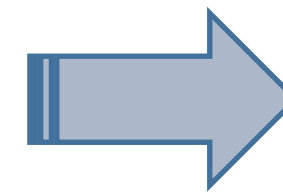
Output

Header	Header
Onida	BPL
LG	Samsung

Table Background Color: Example

Example: Changing the color of a row

```
<table>
<tr style="background-
color:#BDB76B;color:#ffffff;">
<th>Header</th><th>Header</th>
</tr>
<tr>
<td>Onida</td><td>BPL</td>
</tr>
<tr>
<td>LG</td><td>Samsung</td>
</tr>
</table>
```



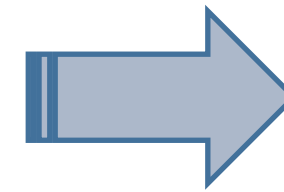
Output

Header	Header
Onida	BPL
LG	Samsung

Table Background Color: Example

Example: Changing the color of a column

```
<table>
  <colgroup>
    <col>
      <col style="background-color:
yellow">
    </col>
  </colgroup>
  <tr>
    <th>Header</th><th>Header</th>
  </tr>
  <tr>
    <td>Onida</td><td>BPL</td>
  </tr>
  <tr>
    <td>LG</td><td>Samsung</td>
  </tr>
</table>
```



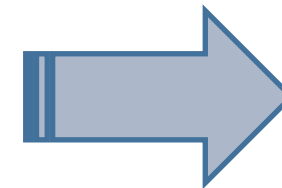
Output

Header	Header
Onida	BPL
LG	Samsung

Table Background Color: Example

Example: Changing the color of a cell

```
<table>
<tr>
<th>Header</th><th>Header</th>
</tr>
<tr>
<td>Onida</td><td>BPL</td>
</tr>
<tr>
<td>LG</td><td style="background-
color:#ff0000;">Samsung</td>
</tr>
</table>
```



Output

Header	Header
Onida	BPL
LG	Samsung

Table Background Color: Elements

The <colgroup> and <col> elements in HTML are used to define and apply styles to columns within a table.

Tag	Description

Note

The <colgroup> tag must be a child of a <table> element.



Adding Caption to a Table

Adding Caption to a Table

In HTML, you can add a title to a table using the `<caption>` tag, which helps users understand the table's context or purpose.



Caption: Syntax

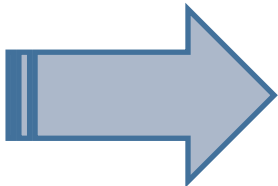
To insert a caption, use this syntax:

```
<table>  
  <caption></caption>  
  <tr> </tr>  
</table>
```



Caption: Example

```
<table border=1px>
  <caption>Vehicles demand monthly
basis</caption>
  <tr>
    <th scope="col">May</th>
    <th>June</th>
    <th>July</th>
    <th>August</th>
  </tr>
  <tr>
    <td>Maruti</td>
    <td>Tata</td>
    <td>Honda</td>
    <td>Toyota</td>
  </tr> </table>
```



Output

May	June	July	August
Maruti	Tata	Honda	Toyota

Adding Tables in the Web Page



Problem Statement:

You have been asked to add tables in the web page using HTML.

Outcome:

By completing this task, you will incorporate tables into a web page using HTML. Begin by creating an index.html file, then add HTML table elements to structure and populate the tables. Finally, view the results in your local browser to ensure the tables are displayed correctly.

Note: Refer to the demo document for detailed steps:
01_Adding_Tables_in_the_Web_Page

Assisted Practice: Guidelines

Steps to be followed:

1. Create the index.html file
2. Add tables in the webpage
3. View the results in your local browser



Merging Cells

Merging Cells

To merge the table cells, the Rowspan and Colspan attributes are used.

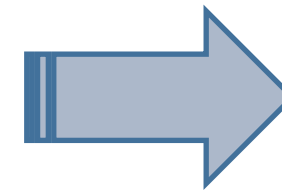
Tag	Description

The colspan attribute is used to merge multiple columns into a single cell, and the rowspan attribute is used to merge multiple rows into a single cell.



Merging Cells: Example

```
<!DOCTYPE html>
<html><head><style>
  table, th, td {
    border: 1px solid red;
    width: 100px;
    height: 50px;
  } </style> </head>
<body>
  <h1>HTML Merging Cells</h1>
  <table><tr>
    <th colspan="2"></th>
    <th></th> </tr>
    <tr>
      <td></td><td></td>
      <td rowspan="2"></td></tr>
    <tr><td></td><td></td>
  </tr></table></body></html>
```



Output

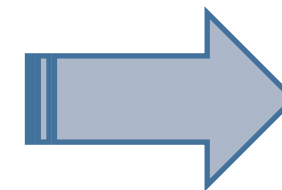
HTML Merging Cells

Text Wrapping

Text Wrapping

Text wrapping can be done with the word-wrap property.

```
<!DOCTYPE html>
<html> <head><style>
div{
width:100%;
border: 1px solid black;
}
div.a{
word-wrap: break-word;
}
</style></head>
<body>
<h3>Word - wrap example </h3>
<div class="a">Word-wrap is used for the
purpose of wrapping. </div>
</body> </html>
```



Output

Word - wrap example

Word- wrap is used only for the wrapping purpose only in this. The word-wrap property allows long words to be able to be broken and wrap onto the next line.

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Table Background Image

Table Background Image

You can use background attributes on a web page or an HTML element.

Set the background images inside the <td> or <tr> tags.

```
<table  
background="image.jpg">  
</table>
```

Applies to the entire table

```
<tr background="image.jpg">  
</tr>
```

Applies to all cells in a row

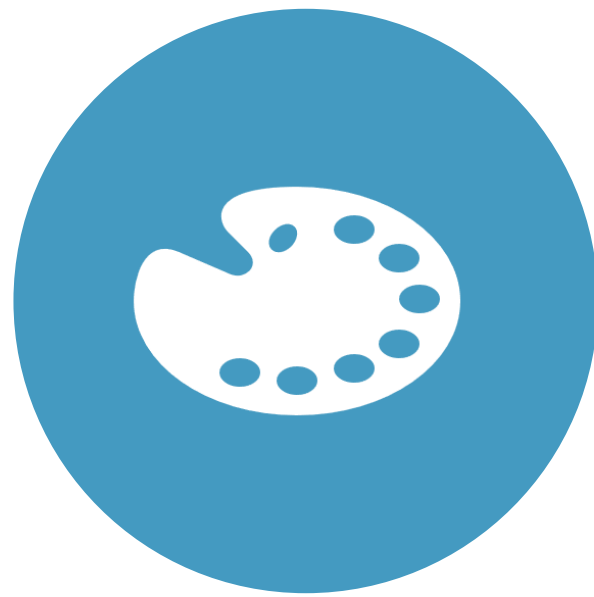
```
<td background="image.jpg">  
</td>
```

Applies to one cell

Cell Alignment

Cell Alignment

The parameters that influence the content's readability are:



Colors



Icons



Fonts



Text alignment

Content should be aligned using the valign and align attributes of the TR and TD (TH) elements.

Cell Alignment: Example

`<tr align="center" valign="top" ></tr>` : Applied to all cells in a row

`<td align="center" valign="top"></td>` : Applied to one cell

```
<!DOCTYPE html>
```

```
<html>
```

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

```
<body>
```

```
<table border="1" width="100%" height="100">
```

```
<tr>
```

```
<td align="left" width="25%">Left</td>
```

```
<td valign="top" width="50%">Top</td>
```

```
</tr>
```

```
</table>
```

```
</body>
```

```
</html>
```

Key Takeaways

- The <table> tag creates a table in HTML.
- Cascading Style Sheets (CSS) define the table background color.
- The <colgroup> and <col> elements change the background color of a column.
- To merge table cells, the rowspan and colspan attributes are used.
- Text wrapping is done with the word-wrap property.
- Content should be aligned using the valign and align attributes of the TR and TD (TH) elements.



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Thank You