

# Tables

## Defining an 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.

## 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>
```

## • HTML `<caption>` Tag

## Example

A table with a caption:

```
<table>
  <caption>Monthly savings</caption>
  <tr>
    <th>Month</th>
    <th>Savings</th>
  </tr>
  <tr>
    <td>January</td>
    <td>$100</td>
```

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

## Definition and Usage

- The <caption> tag defines a table caption.
- The <caption> tag must be inserted immediately after the <table> tag.

**Note:** You can specify only one caption per table.

**Tip:** By default, a table caption will be center-aligned above a table. However, the CSS properties [text-align](#) and [caption-side](#) can be used to align and place the caption.

## • HTML <colgroup> Tag

### Example

Set the background color of the three columns with the <colgroup> and <col> tags:

```
<table>
  <colgroup>
    <col span="2" style="background-color:red">
    <col style="background-color:yellow">
  </colgroup>
  <tr>
    <th>ISBN</th>
    <th>Title</th>
    <th>Price</th>
  </tr>
  <tr>
    <td>3476896</td>
    <td>My first HTML</td>
    <td>$53</td>
  </tr>
</table>
```

## Definition and Usage

- The <colgroup> tag specifies a group of one or more columns in a table for formatting.
- The <colgroup> tag is useful for applying styles to entire columns, instead of repeating the styles for each cell, for each row.

**Note:** The <colgroup> tag must be a child of a <table> element, after any <caption> elements and before any <thead>, <tbody>, <tfoot>, and <tr> elements.

## • HTML <tbody> Tag

### Example

An HTML table with a <thead>, <tbody>, and a <tfoot> element:

```
<table>
  <thead>
    <tr>
      <th>Month</th>
      <th>Savings</th>
    </tr>
  </thead>
  <tbody>
    <tr>
      <td>January</td>
      <td>$100</td>
    </tr>
    <tr>
      <td>February</td>
      <td>$80</td>
    </tr>
  </tbody>
  <tfoot>
    <tr>
      <td>Sum</td>
      <td>$180</td>
    </tr>
  </tfoot>
</table>
```

## Definition and Usage

- The <tbody> tag is used to group the body content in an HTML table.
- The <tbody> element is used in conjunction with the [<thead>](#) and [<tfoot>](#) elements to specify each part of a table (body, header, footer).

Browsers can use these elements to enable scrolling of the table body independently of the header and footer. Also, when printing a large table that spans multiple pages, these elements can enable the table header and footer to be printed at the top and bottom of each page.

The `<tbody>` tag must be used in the following context: As a child of a `<table>` element, after any `<caption>`, `<colgroup>`, and `<thead>` elements.

## • HTML `<thead>` Tag

### Definition and Usage

- The `<thead>` tag is used to group header content in an HTML table.
- The `<thead>` element is used in conjunction with the [<tbody>](#) and [<tfoot>](#) elements to specify each part of a table (header, body, footer).
- Browsers can use these elements to enable scrolling of the table body independently of the header and footer. Also, when printing a large table that spans multiple pages, these elements can enable the table header and footer to be printed at the top and bottom of each page.
- The `<thead>` tag must be used in the following context: As a child of a `<table>` element, after any `<caption>`, and `<colgroup>` elements, and before any `<tbody>`, `<tfoot>`, and `<tr>` elements.

## • HTML `<tfoot>` Tag

### Definition and Usage

- The `<tfoot>` tag is used to group footer content in an HTML table.
- The `<tfoot>` element is used in conjunction with the [<thead>](#) and [<tbody>](#) elements to specify each part of a table (footer, header, body).
- Browsers can use these elements to enable scrolling of the table body independently of the header and footer. Also, when printing a large table that spans multiple pages, these elements can enable the table header and footer to be printed at the top and bottom of each page.
- The `<tfoot>` tag must be used in the following context: As a child of a `<table>` element, after any `<caption>`, `<colgroup>`, `<thead>`, and `<tbody>` elements.

## • HTML `<td>` Tag

### Definition and Usage

1. The `<td>` tag defines a standard cell in an HTML table.
2. An HTML table has two kinds of cells:
  - Header cells - contains header information (created with the [<th>](#) element)
  - Standard cells - contains data (created with the `<td>` element)

3. The text in <th> elements are bold and centered by default.
4. The text in <td> elements are regular and left-aligned by default.

## • HTML <th> Tag

### Definition and Usage

1. The <th> tag defines a header cell in an HTML table.
2. An HTML table has two kinds of cells:
  - Header cells - contains header information (created with the <th> element)
  - Standard cells - contains data (created with the [<td>](#) element)
3. The text in <th> elements are bold and centered by default.
4. The text in <td> elements are regular and left-aligned by default.

## • HTML <tr> Tag

### Definition and Usage

- The <tr> tag defines a row in an HTML table.
- A <tr> element contains one or more [<th>](#) or [<td>](#) elements.

# Forms

## • HTML <form> Tag

### Example

An HTML form with two input fields and one submit button:

```
<form action="/action_page.php" method="get">
  First name: <input type="text" name="fname"><br>
  Last name: <input type="text" name="lname"><br>
  <input type="submit" value="Submit">
</form>
```

### Definition and Usage

- The <form> tag is used to create an HTML form for user input.

# • HTML <fieldset> Tag

## Example

Group related elements in a form:

```
<form>
  <fieldset>
    <legend>Personalia:</legend>
    Name: <input type="text"><br>
    Email: <input type="text"><br>
    Date of birth: <input type="text">
  </fieldset>
</form>
```

## Definition and Usage

- The <fieldset> tag is used to group related elements in a form.
- The <fieldset> tag draws a box around the related elements.

# • HTML <legend> Tag

## Definition and Usage

- The <legend> tag defines a caption for the [<fieldset>](#) element.

# • HTML <label> Tag

## Example

Three radio buttons with labels:

```
<form action="/action_page.php">
  <label for="male">Male</label>
  <input type="radio" name="gender" id="male" value="male"><br>
  <label for="female">Female</label>
  <input type="radio" name="gender" id="female" value="female"><br>
  <label for="other">Other</label>
  <input type="radio" name="gender" id="other" value="other"><br><br>
  <input type="submit" value="Submit">
</form>
```

## Definition and Usage

- The <label> tag defines a label for a <button>, <input>, <meter>, <output>, <progress>, <select>, or <textarea> element.
- The <label> element does not render as anything special for the user. However, it provides a usability improvement for mouse users, because if the user clicks on the text within the <label> element, it toggles the control.
- The for attribute of the <label> tag should be equal to the id attribute of the related element to bind them together.

## • HTML <input> Tag

### Example

An HTML form with three input fields; two text fields and one submit button:

```
<form action="/action_page.php">  
  First name: <input type="text" name="fname"><br>  
  Last name: <input type="text" name="lname"><br>  
  <input type="submit" value="Submit">  
</form>
```

## Definition and Usage

- The <input> tag specifies an input field where the user can enter data.
- <input> elements are used within a <form> element to declare input controls that allow users to input data.
- An input field can vary in many ways, depending on the type attribute.

## • HTML <button> Tag

### Example

A clickable button is marked up as follows:

```
<button type="button">Click Me!</button>
```

## Definition and Usage

- The <button> tag defines a clickable button.
- Inside a <button> element you can put content, like text or images. This is the difference between this element and buttons created with the <input> element.

# • HTML <select> Tag

## Example

Create a drop-down list with four options:

```
<select>
  <option value="volvo">Volvo</option>
  <option value="saab">Saab</option>
  <option value="mercedes">Mercedes</option>
  <option value="audi">Audi</option>
</select>
```

## Definition and Usage

- The <select> element is used to create a drop-down list.
- The [<option>](#) tags inside the <select> element define the available options in the list.

# • HTML <option> Tag

## Definition and Usage

- The <option> tag defines an option in a select list.
- <option> elements go inside a [<select>](#) or [<datalist>](#) element.

# • HTML <optgroup> Tag

## Example

Group related options with <optgroup> tags:

```
<select>
  <optgroup label="Swedish Cars">
    <option value="volvo">Volvo</option>
    <option value="saab">Saab</option>
  </optgroup>
  <optgroup label="German Cars">
    <option value="mercedes">Mercedes</option>
    <option value="audi">Audi</option>
  </optgroup>
</select>
```



## Definition and Usage

- The <optgroup> is used to group related options in a drop-down list.
- If you have a long list of options, groups of related options are easier to handle for a user.

## • HTML <textarea> Tag

### Example

An HTML text area:

```
<textarea rows="4" cols="50">
```

At w3schools.com you will learn how to make a website. We offer free tutorials in all web development technologies.

```
</textarea>
```

## Definition and Usage

- The <textarea> tag defines a multi-line text input control.
- A text area can hold an unlimited number of characters, and the text renders in a fixed-width font (usually Courier).
- The size of a text area can be specified by the cols and rows attributes, or even better; through CSS' height and width properties.