



HTML Tables

An Introduction
Web Development 1
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What is a table?

- A table is a structured set of data made up of rows and columns (tabular data). A table allows you to quickly and easily look up values that indicate some kind of connection between different types of data, for example a person and their age, or a day of the week, or the timetable for a local swimming pool.

Person	Age
Chris	38
Dennis	45
Sarah	29
Karen	47

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Public Swim 06:30 - 10:30	Public Swim 06:30 - 09:00	Public Swim 06:30 - 09:00	Public Swim 06:30 - 11:15	Public Swim 06:30 - 09:00	Lane Swim 08:00 - 09:00	Lane Swim 08:00 - 09:00
Aquacise 10:30 - 11:15	Aqua Jog 09:15 - 10:00	Education Swimming Lessons 09:00 - 12:00	Aquacise 11:15 - 12:00	Education Swimming Lessons 09:00 - 12:00	Oldham Active Kids Swimming Lessons 09:00 - 13:00	Public Swim 09:00 - 11:00
Lane Swim 11:30 - 13:00	Parent & Baby Class 09:30 - 10:15	Lane Swim 12:00 - 13:00	Lane Swim 12:00 - 13:00	Lane Swim 12:00 - 13:00	Parent and Baby 12:00 - 12:45	Aquacise 11:00 - 11:45
Education Swimming Lessons	Public Swim 10:00 - 11:45	Public Swim 13:00 - 16:00	Education Swimming Lessons	Oldham Active Kids Swimming	Public Swim 13:00 - 17:00	Public Swim 11:45 - 13:00

<table>: The Table element

- The <table> HTML element represents tabular data—that is, information presented in a two-dimensional table comprised of rows and columns of cells containing data.

- <https://developer.mozilla.org/en-US/docs/Web/HTML/Element/table>

```
<table>
  <caption>
    Front-end web developer course 2021
  </caption>
  <thead>
    <tr>
      <th scope="col">Person</th>
      <th scope="col">Most interest in</th>
      <th scope="col">Age</th>
    </tr>
  </thead>
  <tbody>
    <tr>
      <th scope="row">Chris</th>
      <td>HTML tables</td>
      <td>22</td>
    </tr>
    <tr>
      <th scope="row">Dennis</th>
      <td>Web accessibility</td>
      <td>45</td>
    </tr>
    <tr>
      <th scope="row">Sarah</th>
      <td>JavaScript frameworks</td>
      <td>29</td>
    </tr>
    <tr>
      <th scope="row">Karen</th>
      <td>Web performance</td>
      <td>36</td>
    </tr>
  </tbody>
  <tfoot>
    <tr>
      <th scope="row" colspan="2">Average age</th>
      <td>33</td>
    </tr>
  </tfoot>
</table>
```

Person	Most interest in	Age
Chris	HTML tables	22
Dennis	Web accessibility	45
Sarah	JavaScript frameworks	29
Karen	Web performance	36
Average age		33

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Rows and Columns

- A table is made up of rows and columns
- The intersection of rows and columns are data cells
- A row is denoted by the `<tr>` tag
- A data cell is denoted by the `<td>` tag
- A `<tr>` will have many children `<td>`

```
<tr>
  <td>Hi, I'm your first cell.</td>
  <td>I'm your second cell.</td>
  <td>I'm your third cell.</td>
  <td>I'm your fourth cell.</td>
</tr>
```

Hi, I'm your first cell.	I'm your second cell.	I'm your third cell.	I'm your fourth cell.
--------------------------	-----------------------	----------------------	-----------------------

<thead>: The Table Head element

- The <thead> HTML element encapsulates a set of table rows (<tr> elements), indicating that they comprise the head of a table with information about the table's columns. This is usually in the form of column headers (<th> elements).
- The <th> HTML element defines a cell as the header of a group of table cells and may be used as a child of the <tr> element. The exact nature of this group is defined by the scope and headers attributes.

Player	Gloobles	Za'taak
TR-7	7	4,569
Khires Odo	7	7,223
Mia Oolong	9	6,219

Alien football stars

```
<table>
  <caption>
    Alien football stars
  </caption>
  <tr>
    <th scope="col">Player</th>
    <th scope="col">Gloobles</th>
    <th scope="col">Za'taak</th>
  </tr>
  <tr>
    <th scope="row">TR-7</th>
    <td>7</td>
    <td>4,569</td>
  </tr>
  <tr>
    <th scope="row">Khires Odo</th>
    <td>7</td>
    <td>7,223</td>
  </tr>
  <tr>
    <th scope="row">Mia Oolong</th>
    <td>9</td>
    <td>6,219</td>
  </tr>
</table>
```

<caption>: The Table Caption element

```
<table>
  <caption>
    He-Man and Skeletor facts
  </caption>
  <tr>
    <td></td>
    <th scope="col" class="heman">He-Man</th>
    <th scope="col"
class="skeletor">Skeletor</th>
  </tr>
  <tr>
    <th scope="row">Role</th>
    <td>Hero</td>
    <td>Villain</td>
  </tr>
  <tr>
    <th scope="row">Weapon</th>
    <td>Power Sword</td>
    <td>Havoc Staff</td>
  </tr>
  <tr>
    <th scope="row">Dark secret</th>
    <td>Expert florist</td>
    <td>Cries at romcoms</td>
  </tr>
</table>
```

	HE-MAN	Skeletor
Role	Hero	Villain
Weapon	Power Sword	Havoc Staff
Dark secret	Expert florist	Cries at romcoms

He-Man and Skeletor facts

Scope attribute

Defines the cells that the header (defined in the <th>) element relates to.

Possible enumerated values are:

- row: the header relates to all cells of the row it belongs to;
- col: the header relates to all cells of the column it belongs to;
- rowgroup: the header belongs to a rowgroup and relates to all of its cells;
- colgroup: the header belongs to a colgroup and relates to all of its cells.
- If the scope attribute is not specified, or its value is not row, col, rowgroup, or colgroup, then browsers automatically select the set of cells to which the header cell applies.

```
<table>
  <caption>
    He-Man and Skeletor facts
  </caption>
  <tr>
    <td></td>
    <th scope="col" class="heman">He-Man</th>
    <th scope="col"
class="skeletor">Skeletor</th>
  </tr>
  <tr>
    <th scope="row">Role</th>
    <td>Hero</td>
    <td>Villain</td>
  </tr>
  <tr>
    <th scope="row">Weapon</th>
    <td>Power Sword</td>
    <td>Havoc Staff</td>
  </tr>
  <tr>
    <th scope="row">Dark secret</th>
    <td>Expert florist</td>
    <td>Cries at romcoms</td>
  </tr>
</table>
```

	HE-MAN	Skeletor
Role	Hero	Villain
Weapon	Power Sword	Havoc Staff
Dark secret	Expert florist	Cries at romcoms

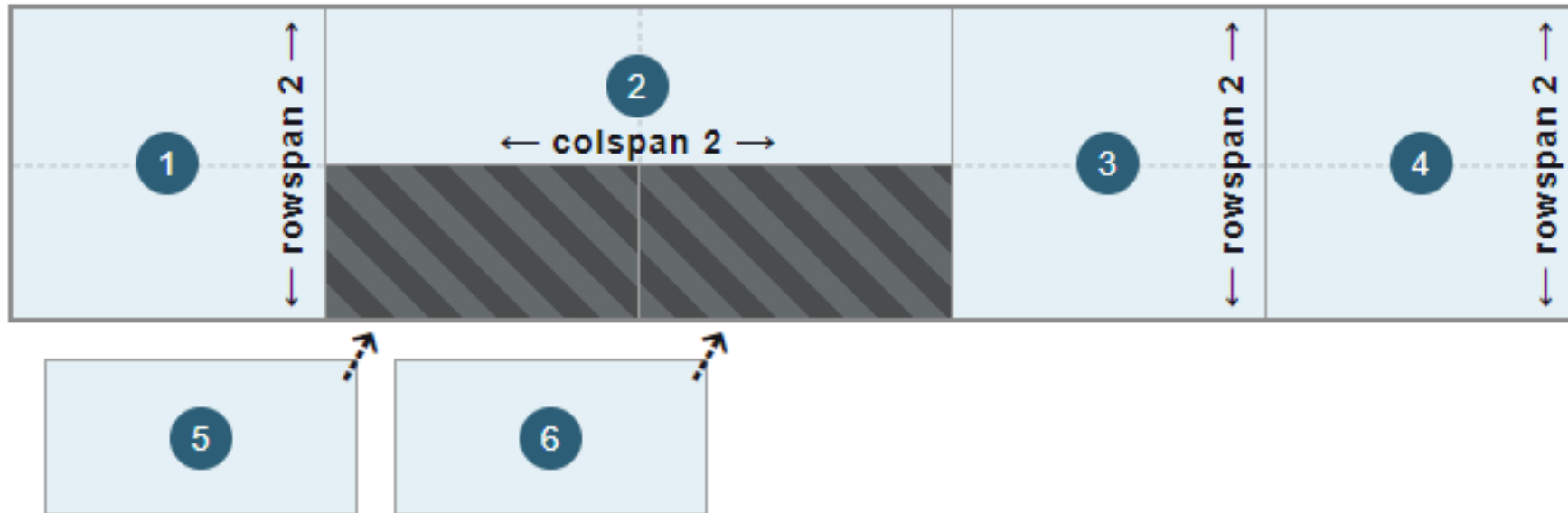
He-Man and Skeletor facts

rowspan & colspan

- rowspan
 - Contains a non-negative integer value that indicates for how many rows the data cell spans or extends.
 - The default value is 1; if its value is set to 0, it extends until the end of the table grouping section (<thead>, <tbody>, <tfoot>, even if implicitly defined), that the cell belongs to. Values higher than 65534 are clipped to 65534.
- colspan
 - Contains a non-negative integer value that indicates how many columns the data cell spans or extends.
 - The default value is 1. User agents dismiss values higher than 1000 as incorrect, setting to the default value (1).

rowspan & colspan

Illustration demonstrating column and row spanning of table cells



rowspan & colspan

```
<!DOCTYPE html>
<html>
<head>
<style>
table, th, td {
  border: 1px solid black;
  border-collapse: collapse;
}
</style>
</head>
<body>

<h2>Cell that spans two columns</h2>
<p>To make a cell span more than one column, use the colspan attribute.</p>

<table style="width:100%">
  <tr>
    <th colspan="2">Name</th>
    <th>Age</th>
  </tr>
  <tr>
    <td>Jill</td>
    <td>Smith</td>
    <td>43</td>
  </tr>
  <tr>
    <td>Eve</td>
    <td>Jackson</td>
    <td>57</td>
  </tr>
</table>
</body>
</html>
```

Name		Age
Jill	Smith	43
Eve	Jackson	57

rowspan & colspan

```
<!DOCTYPE html>
<html>
<head>
<style>
table, th, td {
  border: 1px solid black;
  border-collapse: collapse;
}
</style>
</head>
<body>

<h2>Cell that spans two rows</h2>
<p>To make a cell span more than one row, use the rowspan attribute.</p>

<table style="width:100%">
  <tr>
    <th>Name</th>
    <td>Jill</td>
  </tr>
  <tr>
    <th rowspan="2">Phone</th>
    <td>555-1234</td>
  </tr>
  <tr>
    <td>555-8745</td>
  </tr>
</table>
</body>
</html>
```

Name	Jill
Phone	555-1234
	555-8745

Bulma Table

Pos	Team	Pld	W	D	L	GF	GA	GD	Pts	Qualification or relegation
1	Leicester City (C)	38	23	12	3	68	36	+32	81	Qualification for the Champions League group stage
2	Arsenal	38	20	11	7	65	36	+29	71	Qualification for the Champions League group stage
3	Tottenham Hotspur	38	19	13	6	69	35	+34	70	Qualification for the Champions League group stage
4	Manchester City	38	19	9	10	71	41	+30	66	Qualification for the Champions League play-off round
5	Manchester United	38	19	9	10	49	35	+14	66	Qualification for the Europa League group stage
6	Southampton	38	18	9	11	59	41	+18	63	Qualification for the Europa League group stage
								+14	62	Qualification for the Europa League third qualifying round
								+13	60	
								-14	51	
								+6	50	
								+4	47	
								-10	47	
								-10	45	
								-14	43	
								-12	42	
								-22	42	
								-14	39	
								-21	37	Relegation to the Football League Championship
								-28	34	Relegation to the Football League Championship
20	Aston Villa (R)	38	3	8	27	27	76	-49	17	Relegation to the Football League Championship
Pos	Team	Pld	W	D	L	GF	GA	GD	Pts	Qualification or relegation

The inevitable HTML **table**, with special case cells

You can create a **Bulma table** simply by attaching a single `table` CSS class on a `<table>` HTML element with the following structure:

- `<table class="table">` as the main **container**
 - `thead` the optional **top** part of the table
 - `tfoot` the optional **bottom** part of the table
 - `tbody` the main **content** of the table
 - `tr` each table **row**
 - `th` a table cell **heading**
 - `td` a table **cell**

You can set a table row as **selected** by appending the `is-selected` modifier on a `<tr>`

Chill

Chill



A playlist to chill to

[Play](#)[Open](#)[Remove](#)

Title	Artist	Duration
Remurdered	Mogwai	6:26
Your Hand in Mine	Explosions in the Sky	8:17
Undertow	Lisa Hannigan	3:24

```

<table class="table is-fullwidth">
  <thead>
    <tr>
      <th>Title</th>
      <th>Artist</th>
      <th>Duration</th>
    </tr>
  </thead>
  <tbody>
    <tr>
      <td>Remurdered</td>
      <td>Mogwai</td>
      <td>6:26</td>
    </tr>
    <tr>
      <td>Your Hand in Mine</td>
      <td>Explosions in the Sky</td>
      <td>8:17</td>
    </tr>
    <tr>
      <td>Undertow</td>
      <td>Lisa Hannigan</td>
      <td>3:24</td>
    </tr>
  </tbody>
</table>

```

Title	Artist	Duration
Remurdered	Mogwai	6:26
Your Hand in Mine	Explosions in the Sky	8:17
Undertow	Lisa Hannigan	3:24

Notice the repetition

Iterate an array of objects

```
window.dotify.components.createPlaylistList = (songs = []) => {  
  let songsToRows = '';  
  for (let i = 0; i < songs.length; i++) {  
    songsToRows += `  
    <tr>  
      <td>${songs[i].title}</td>  
      <td>${songs[i].artist}</td>  
      <td>${songs[i].duration}</td>  
    </tr>`;  
  }  
  return `  
<div class="column is-8">  
  <table class="table is-fullwidth">  
    <thead>  
      <tr>  
        <th>Title</th>  
        <th>Artist</th>  
        <th>Duration</th>  
      </tr>  
    </thead>  
    <tbody>  
      ${songsToRows}  
    </tbody>  
  </table>  
</div>`;  
}
```



```
window.dotify.components.createPlaylistList = (songs = []) => {  
  console.log(songs);  
  const songsToRows = songs.map(song => {  
    return `  
    <tr>  
      <td>${song.title}</td>  
      <td>${song.artist}</td>  
      <td>${song.duration}</td>  
    </tr>`  
  });  
  return `  
<div class="column is-8">  
  <table class="table is-fullwidth">  
    <thead>  
      <tr>  
        <th>Title</th>  
        <th>Artist</th>  
        <th>Duration</th>  
      </tr>  
    </thead>  
    <tbody>  
      ${songsToRows.join()}  
    </tbody>  
  </table>  
</div>`  
}
```