

# Lecture 7

**HTML**



**HTML Forms - Part 2**

- **HTML Tables**
  - **<table>**
  - **<tr>**
  - **<td>**
  - **<thead>**
  - **<tbody>**
  - **<tfooter>**
  - **<caption>**

# HTML Tables

# Define a HTML Table

The `<table>` tag defines an HTML table.

Each table row is defined with a `<tr>` tag. Each table header is defined with a `<th>` tag. Each table data/cell is defined with a `<td>` tag.

By default, the text in `<th>` elements are bold and centered.

By default, the text in `<td>` elements are regular and left-aligned.

```
<table>
  <tr>
    <th>Firstname</th>
    <th>Lastname</th>
    <th>Age</th>
  </tr>
  <tr>
    <td>Ric</td>
    <td>Flair</td>
    <td>73</td>
  </tr>
</table>
```

Firstname	Lastname	Age
Ric	Flair	73

## <table> Table Element

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

HTML tables allow web developers to arrange data into rows and columns.

Simple table with header

First name	Last name
John	Doe
Jane	Doe

Countries	Capitals	Population	Language
USA	Washington, D.C.	309 million	English
Sweden	Stockholm	9 million	Swedish

## <tr> Table Row Element

```
<table>
  <tr>
    <th>Player</th>
    <th>Position</th>
    <th>Team</th>
  </tr>
  <tr>
    <th>Wayne Gretzky</th>
    <td>Forward</td>
    <td>2857</td>
  </tr>
  <tr>
    <th>Jaromir Jagr</th>
    <td>Forward</td>
    <td>1921</td>
  </tr>
</table>
```

The **HTML <tr> element** defines a row of cells in a table. The row's cells can then be established using a mix of <td> (data cell) and <th> (header cell) elements.

Player	Position	Team
Wayne Gretzky	Forward	2857
Jaromir Jagr	Forward	1921

## <td> Table Element

```
<table>
  <tr>
    <th>Player</th>
    <th>Position</th>
    <th>Team</th>
  </tr>
  <tr>
    <th>Wayne Gretzky</th>
    <td>Forward</td>
    <td>2857</td>
  </tr>
  <tr>
    <th>Jaromir Jagr</th>
    <td>Forward</td>
    <td>1921</td>
  </tr>
</table>
```

The **HTML <td> element** defines a cell of a table that contains data. It participates in the *table model*.

Player	Position	Team
Wayne Gretzky	Forward	2857
Jaromir Jagr	Forward	1921

## <th> Table Element

```
<table>
  <caption>Alien football stars</caption>
  <tr>
    <th scope="col">Player</th>
    <th scope="col">Position</th>
    <th scope="col">Points</th>
  </tr>
  <tr>
    <th scope="row">Wayne Gretzky</th>
    <td>F</td>
    <td>2387</td>
  </tr>
  <tr>
    <th scope="row">Steve Yzerman</th>
    <td>F</td>
    <td>1755</td>
  </tr>
</table>
```

The **HTML <th> element** defines a cell as header of a group of table cells. The exact nature of this group is defined by the `scope` and `headers` attributes.

### scope

This enumerated attribute defines the cells that the header (defined in the `<th>`) element relates to. It may have the following values:

- **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. These cells can be placed to the right or the left of the header, depending on the value of the `dir` attribute in the `<table>` element.
- **colgroup**: The header belongs to a **colgroup** and relates to all of its cells.
- **auto** (default)



## <thead> Table Element

The **HTML <thead> element** defines a set of rows defining the head of the columns of the table.

```
<table>
  <thead>
    <tr>
      <th scope="col">Player</th>
      <th scope="col">Team</th>
    </tr>
  </thead>
  <tbody>
    <tr>
      <th scope="row">Gordie Howe</th>
      <td>Red Wings</td>
    </tr>
    <tr>
      <th scope="row">Bobby Orr</th>
      <td>Boston Bruins</td>
    </tr>
  </tbody>
</table>
```

Player	Team
Gordie Howe	Red Wings
Bobby Orr	Boston Bruins

## <tbody> Table Element

```
<table>
  <thead>
    <tr>
      <th>Wrestlers</th>
      <th scope="col">Territory</th>
    </tr>
  </thead>
  <tbody>
    <tr>
      <th scope="row">Ric Flair</th>
      <td>NWA</td>
    </tr>
    <tr>
      <th scope="row">Randy Savage</th>
      <td>ICW</td>
    </tr>
  </tbody>
</table>
```

The **HTML Table Body element** (<tbody>) encapsulates a set of table rows (<tr> elements), indicating that they comprise the body of the table (<table>).

Wrestlers	Territory
Ric Flair	NWA
Randy Savage	ICW

```

<thead>
  <tr>
    <th>Wrestler</th>
    <th scope="col">World Titles</th>
  </tr>
</thead>
<tbody>
  <tr>
    <th scope="row">Ric Flair</th>
    <td>21</td>
  </tr>
  <tr>
    <th scope="row">John Cena</th>
    <td>16</td>
  </tr>
</tbody>
<tfoot>
  <tr>
    <th scope="row">Totals</th>
    <td>37</td>
  </tr>
</tfoot>

```

The **HTML <tfoot> element** defines a set of rows summarizing the columns of the table.

Wrestler	World Titles
Ric Flair	21
John Cena	16
<b>Totals</b>	<b>37</b>

**<tfooter> Table 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>
</table>

```

The **HTML <caption> element** specifies the caption (or title) of a table.

	HE-MAN	Skeletor
Role	Hero	Villain
Weapon	Power Sword	Havoc Staff

He-Man and Skeletor facts

**<caption> Table Element**

## <colspan> Attribute

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

```
<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>
```

Name	Telephone	
Bill Gates	55577854	55577855

## <rowspan> Attribute

To make a cell span more than one row, use the **rowspan** attribute:

```
<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>
```

<b>Name:</b>	Bill Gates
<b>Telephone:</b>	55577854
	55577855

# Table Styling

To add a border to a table, use the CSS `border` property:

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

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

To align content in a table, use the CSS `text-align` property:

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

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