



NextGen



Web



Session: 9

Creating Tables



Objectives

- Describe how to create and format tables
- Explain the table size and the width of a column
- Explain the process of merging table cells
- Explain the page layout for tables



Creating & Formatting Tables 1-2

- A table is made up of rows and columns.
The intersection of each row and column is called as a cell.
- A row is made up of a set of cells that are placed horizontally.
- A column is made up of set of cells that are placed vertically.
- Data can be represented in a tabular format by **TABLE** element.
- **TR** element divides the table into rows and the **TD** element specifies columns for each row.
- By default, a table does not have a border.
- The **border** attribute of the **TABLE** element specifies a border for making the table visible in a Web page.



Creating & Formatting Tables 2-2

```
<!DOCTYPE HTML>
<html>
  <head>
    <title>Languages</title>
  </head>
  <body>
    <h2>Main Languages</h2>
    <table border="1">
      <tr>
        <td>English</td>
        <td>German</td>
      </tr>
      <tr>
        <td>French</td>
        <td>Italian</td>
      </tr>
    </table>
  </body>
</html>
```





Table Headings

- Heading for each column can be specified the by **TH** element
- The text included within the **TH** element appears in bold.

```
<table border="1">
  <tr>
    <th>Name</th>
    <th>Age</th>
    <th>Place</th>
  </tr>
  <tr>
    <td>Mark</td>
    <td>17</td>
    <td>Madrid</td>
  </tr>
  <tr>
    <td>John</td>
    <td>19</td>
    <td>London</td>
  </tr>
</table>
```

A screenshot of a web browser window titled "List of Students". The address bar shows a local file path: file:///D:/H. The page content displays the title "List of Students" in a large, bold font. Below the title is a table with three columns: Name, Age, and Place. The table contains two data rows: one for Mark (Age 17, Place Madrid) and one for John (Age 19, Place London). The table is styled with a simple border.

Name	Age	Place
Mark	17	Madrid
John	19	London



Merging Table Cells

- To change the cells of a table to different height and width, **colspan** and **rowspan** attributes can be used:
 - **colspan** : specify the number of columns to span.
 - **rowspan** : specify the number of rows to span.
- Spanning refers to a process of extending a cell across multiple rows or columns

A screenshot of a web browser window titled "Favorite Destination". The address bar shows a file path: `file:///D:/HTML%205%20Source%20C`. The page content is titled "Report" and contains a table with the following structure:

Results		Range		
		18 to 20	25 to 50	Over 50
Your favorite vacation destination	Dubai	25%	50%	25%
	Bangkok	40%	30%	30%
	Switzerland	30%	20%	50%



Colspan Attribute

- To span two or more columns, use the **colspan** attribute of the **TD** and **TH** elements.
- The **colspan** attribute allows to span a cell along a horizontal row.
- The value of the **colspan** attribute specifies the number of cells across

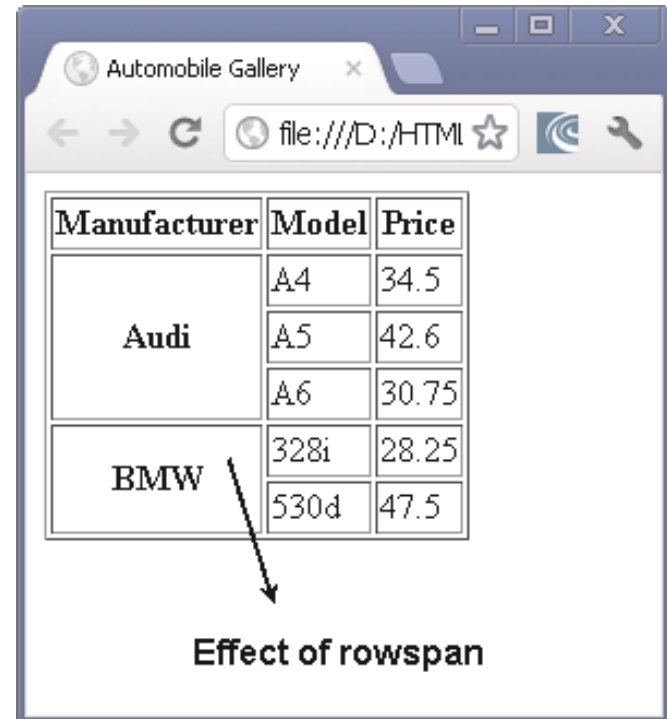
```
<tr>
  <th colspan="2">IT</th>
  <th colspan="2">Accounts</th>
</tr>
<tr>
  <th>Name</th>
  <th>Location</th>
  <th>Name</th>
  <th>Location</th>
</tr>
<tr>
  <td>David</td>
  <td>New York</td>
  <td>John</td>
  <td>London</td>
</tr>
```

IT		Accounts	
Name	Location	Name	Location
David	New York	John	London

Rowspan Attribute

- The **rowspan** attribute spans a data cell across two or more rows.
- It allows to span a data cell along a vertical column.

```
<table border="1">
  <tr>
    <th>Manufacturer</th>
    <th>Model</th>
    <th>Price</th>
  </tr>
  <tr>
    <th rowspan="3">Audi</th>
    <td>A4</td>
    <td>34.5</td>
  </tr>
  <tr>
    <td>A5</td>
    <td>42.6</td>
  </tr>
  <tr>
    <td>A6</td>
    <td>30.75</td>
  </tr>
  <tr>
    <th rowspan="2">BMW</th>
    <td>328i</td>
    <td>28.25</td>
  </tr>
  <tr>
    <td>530d</td>
    <td>47.5</td>
  </tr>
</table>
```



Manufacturer	Model	Price
Audi	A4	34.5
	A5	42.6
	A6	30.75
BMW	328i	28.25
	530d	47.5

Effect of rowspan



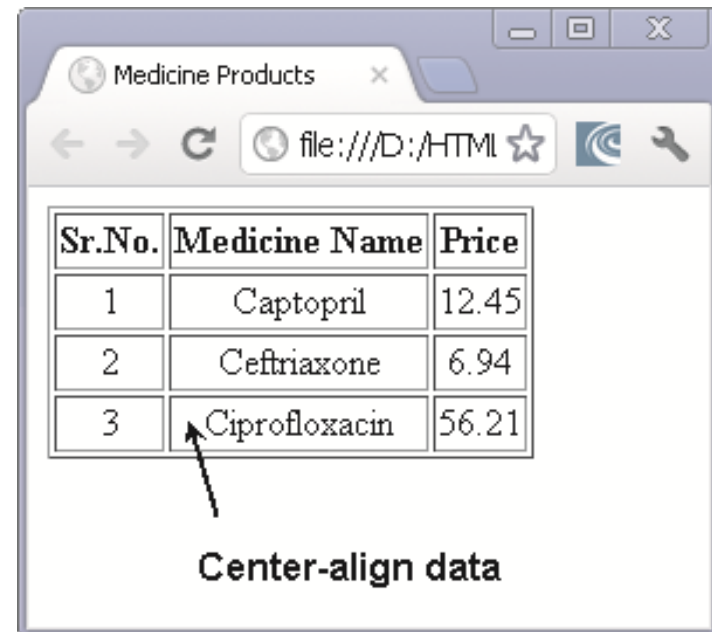
Horizontal Alignment

1-2

- Determines the representation of text along the left, right, or center positions.
- HTML5 has deprecated the align attribute.
- The four possible values for setting the horizontal alignment:
 - **left:**
Aligns the data within a cell on the left side, is the default value for table content.
 - **center:**
Aligns the data within the cell on the center, is the default value for table headings.
 - **right:**
Aligns the data within the cell on the right side.
 - **justify:**
Aligns the data within the cell by adjusting the text at the edges.

- To set the alignment with style you can use the **text-align** attribute :

```
<table border="1">
  <tr>
    <th>Sr.No.</th>
    <th>Medicine Name</th>
    <th>Price</th>
  </tr>
  <tr style="text-align: center;">
    <td>1</td>
    <td>Captopril</td>
    <td>12.45</td>
  </tr>
  <tr style="text-align: center;">
    <td>2</td>
    <td>Ceftriaxone</td>
    <td>6.94</td>
  </tr>
  <tr style="text-align: center;">
    <td>3</td>
    <td>Ciprofloxacin</td>
    <td>56.21</td>
  </tr>
</table>
```



Sr.No.	Medicine Name	Price
1	Captopril	12.45
2	Ceftriaxone	6.94
3	Ciprofloxacin	56.21

Center-align data



Vertical Alignment

- Vertically align the position of data by using the **valign** attribute.
- HTML5 has deprecated the **valign** attribute.
- The possible values of vertical alignment are as follows:
 - **top:**
Vertically aligns the data within the cell at the top.
 - **middle:**
Vertically aligns the data within the cell at the center.
 - **bottom:**
Vertically aligns the data within the cell at the bottom.

Example

```
<td style="text-align:center; vertical-align:middle">  
Aptech Web site </td>
```



Margin Attributes

- Data in a table might appear cluttered, which may affect the readability and then it is difficult to comprehend data.
- To overcome this issue, use the cell padding attributes.

➤ Padding

- Padding is the amount of space between the content of element and its outer edge.
- For tables, padding is referred as a space between the text and the cell border.
- Cell padding allows the user to control the look of the content on a page.
- Example: `<td style="padding:4px">`



Caption Element

```
<table border="1">
  <caption>Travel Expense Report</caption>
  <tr>
    <th>&nbsp;</th>
    <th>Meals</th>
    <th>Hotels</th>
    <th>Transport</th>
  </tr>
  <tr>
    <td>25-Apr</td>
    <td>37.74</td>
    <td>112.00</td>
    <td>45.00</td>
  </tr>
  <tr>
    <td>26-Apr</td>
    <td>27.28</td>
    <td>112.00</td>
    <td>45.00</td>
  </tr>
  <tr>
    <td>Totals</td>
    <td>65.02</td>
    <td>224.00</td>
    <td>90.00</td>
  </tr>
</table>
```

Travel Expense Report				Caption Element
	Meals	Hotels	Transport	
25-Apr	37.74	112.00	45.00	Caption Element
26-Apr	27.28	112.00	45.00	
Totals	65.02	224.00	90.00	Caption Element



Table Size & Width of a Column

- Table size can be expanded when adding more rows & columns.
- To set default width for the table, use **STYLE** section in **HEAD**
- To set the width of a column in pixels, use **style** attribute in the **<TD>** tag.

```
<table border="1">
  <tr>
    <td style="width: 200px">Flowers</td>
    <td style="width: 80px">Fruits</td>
  </tr>
  <tr>
    <td style="width: 200px">Vegetables</td>
    <td style="width: 80px">Trees</td>
  </tr>
</table>
```

Table

Flowers	Fruits
Vegetables	Trees



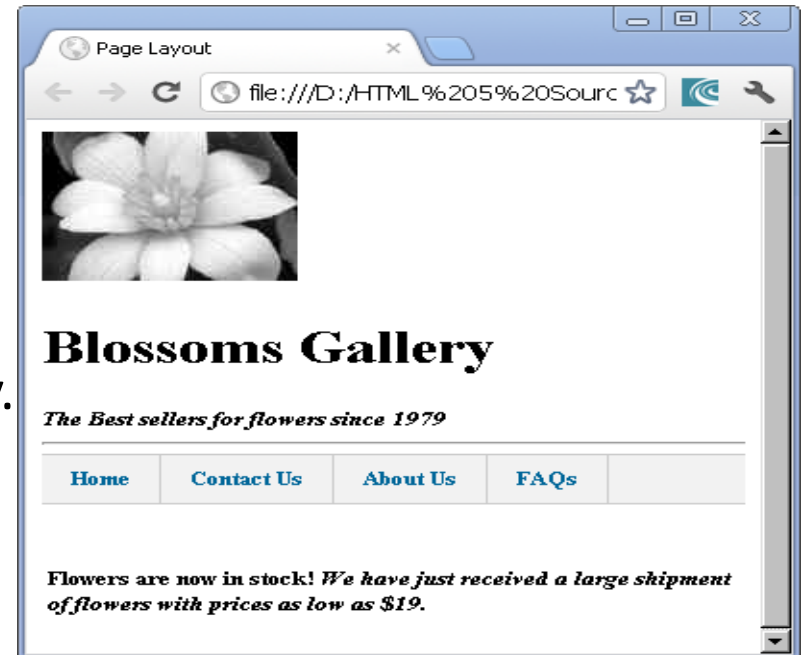
Apply Borders by Using Styles 1-2

- CSS can be used for applying borders as it is the best reliable and flexible method.
- Use **style**-based border for **<table>** and **<td>** tags as followed:
 - **border-width:**
Set the thickness of border, the values are specified in pixels.
 - **border-color:**
Set color of the border by specifying either name, or RGB value, or hexadecimal number.
 - **border-style:**
Set the line style: solid, dashed, groove, dotted, outset, ridge, inset, or none.



Apply Borders by Using Styles 2-2

- To set all these attributes at one time, can use the **border** attribute and place the settings in the order of **width**, **color**, and **style** respectively.
- To format the sides of the border individually, replace the border attribute with border-bottom, border-top, border-right, or border-left attribute.
- can apply these attributes to the entire table or individual cells and also create rules in the **<STYLE>** area.





Summary

- Tables allow to view data in a structured and classified format.
- Padding is the amount of space between content and its outer edge.
- Caption element defines a caption for a table. It is a sub-element of the `<table>` element.
- Spanning refers to a process of extending a cell across multiple rows or columns.
- The `rowspan` attribute spans a data cell across two or more rows.
- The `colspan` attribute allows to specify the number of columns a cell should span.
- The `border` attribute of the table element allows to specify a border for making the table visible in a Web page.