

Design Techniques

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Floating Elements

- The float property lets you position an element to the left or right edge of its containing element
- You can float an image or content box to the left or right of text

Tropaeolum commonly known as nasturtium



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Image: <http://en.wikipedia.org/wiki/Tropaeolum>

```
img {  
  
    float: left;  
  
    margin-right: 10px;  
}
```

Figure 6-21: Floating an image

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Table Properties

ELEMENT	DESCRIPTION
table	Establishes the table; contains all other elements that specify caption, rows, and content
tr	Table row; contains the table cells
td	Table data cell; contains the table data
th	Table header cell; contains header information for a column of data
caption	Provides a short description of the table's contents
thead	Signifies table header
tbody	Signifies table body
tfoot	Signifies table footer
col	Specifies column properties
colgroup	Specifies multiple column properties

Table 10-1: HTML Table Elements

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Example

```
<table>
<caption>Best-Selling Albums Worldwide</caption>
<tr>
  <th>Artist</th>
  <th>Album</th>
  <th>Released</th>
  <th>Genre</th>
  <th>Sales (millions)</th>
</tr>
<tr>
  <td>Michael Jackson</td>
  <td>Thriller</td>
  <td>1982</td>
  <td>Pop</td>
  <td>110</td>
</tr>
<tr>
  <td>AC/DC</td>
  <td>Back in Black</td>
  <td>1980</td>
  <td>Hard Rock</td>
  <td>49</td>
</tr>
```

```
<tr>
  <td>Pink Floyd</td>
  <td>The Dark Side of the Moon</td>
  <td>1973</td>
  <td>Rock</td>
  <td>45</td>
</tr>
<tr>
  <td>Whitney Houston</td>
  <td>The Bodyguard</td>
  <td>1992</td>
  <td>Soundtrack</td>
  <td>44</td>
</tr>
<tr>
  <td>Eagles</td>
  <td>Greatest Hits</td>
  <td>1976</td>
  <td>Rock</td>
  <td>42</td>
</tr>
</table>
```

Example

Best-Selling Albums Worldwide

Artist	Album	Released	Genre	Sales (millions)
Michael Jackson	Thriller	1982	Pop	110
AC/DC	Back in Black	1980	Hard Rock	49
Pink Floyd	The Dark Side of the Moon	1973	Rock	45
Whitney Houston	The Bodyguard	1992	Soundtrack	44
Eagles	Greatest Hits	1976	Rock	42

caption

table header row

Figure 10-1: Basic HTML table

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Collapsing Table Borders

- Tables are more legible with the table borders collapsed
- Use the border-collapsed property

```
table {border-collapse: collapse;}
```


Artist	
Michael Jackson	Thriller
AC/DC	Back in Black
Pink Floyd	The Dark Side of the Moon
Whitney Houston	The Bodyguard
Eagles	Greatest Hits

default borders

Artist	
Michael Jackson	Thriller
AC/DC	Back in Black
Pink Floyd	The Dark Side of the Moon
Whitney Houston	The Bodyguard
Eagles	Greatest Hits

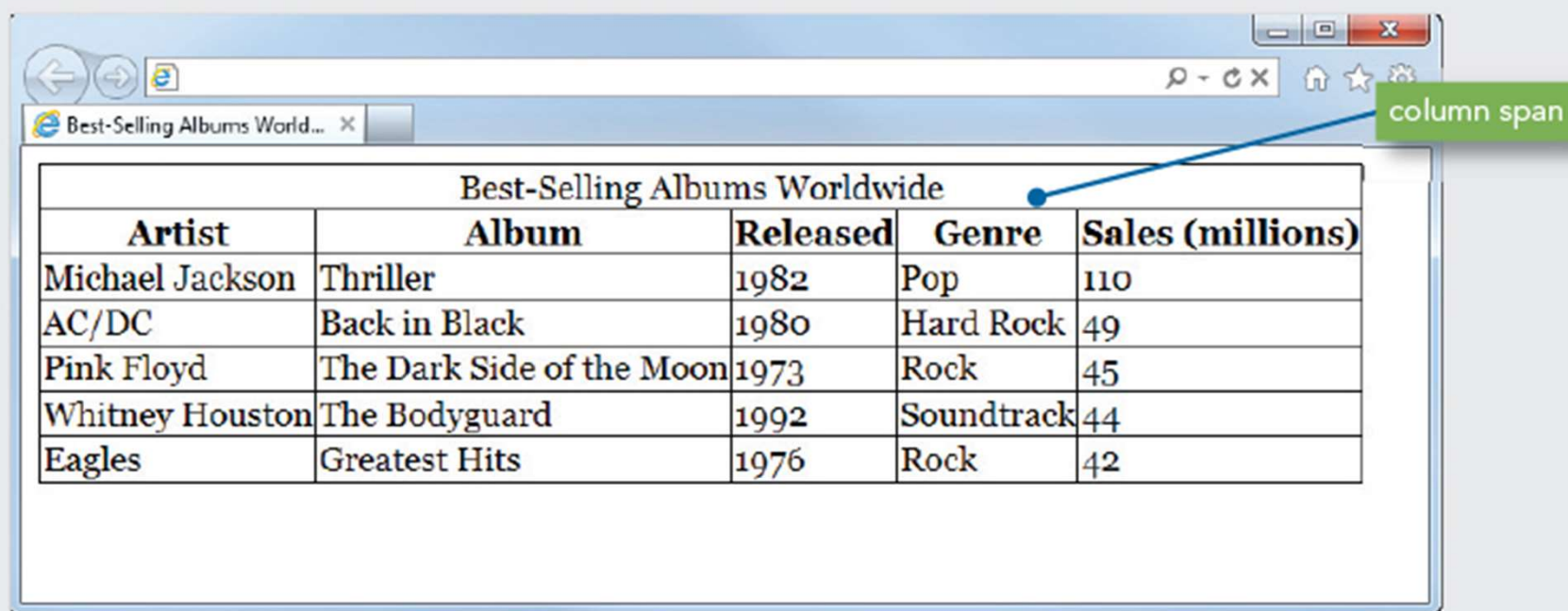
collapsed borders

Figure 10-2: Table with borders collapsed
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Spanning Columns

- The colspan attribute lets you create cells that span multiple columns

```
<td class="title" colspan="5">  
<caption>  
    Best-Selling Albums Worldwide  
</caption>  
</td>
```



Best-Selling Albums Worldwide

Artist	Album	Released	Genre	Sales (millions)
Michael Jackson	Thriller	1982	Pop	110
AC/DC	Back in Black	1980	Hard Rock	49
Pink Floyd	The Dark Side of the Moon	1973	Rock	45
Whitney Houston	The Bodyguard	1992	Soundtrack	44
Eagles	Greatest Hits	1976	Rock	42

Figure 10-3: Table with a column span

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Spanning Rows

- The rowspan attribute lets you create cells that span multiple rows

```
<table>
```

```
<tr>
```

```
<td class="title" rowspan="6">
```

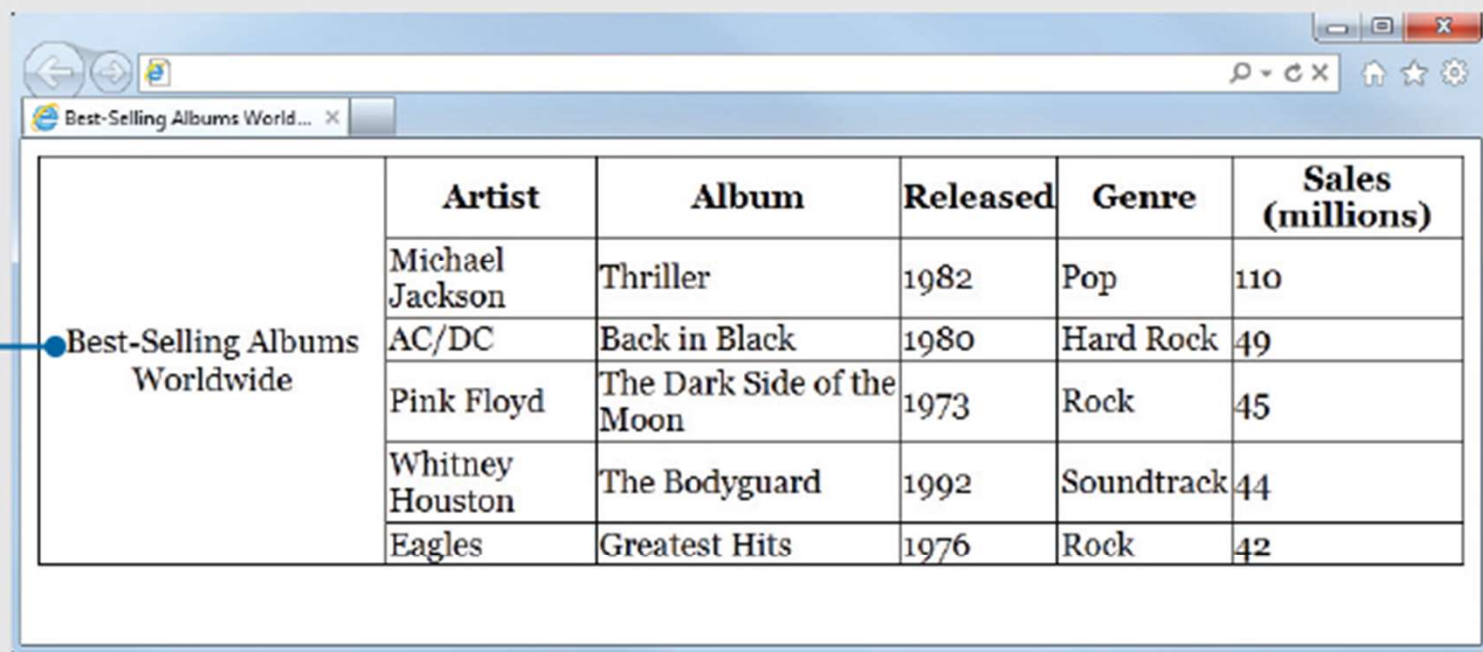
```
Best-Selling Albums Worldwide</td>
```

```
  <th>Artist</th>
```

```
  ..the rest of the table
```

```
Try Table_row_span.html
```

row span



Best-Selling Albums Worldwide	Artist	Album	Released	Genre	Sales (millions)
	Michael Jackson	Thriller	1982	Pop	110
	AC/DC	Back in Black	1980	Hard Rock	49
	Pink Floyd	The Dark Side of the Moon	1973	Rock	45
	Whitney Houston	The Bodyguard	1992	Soundtrack	44
	Eagles	Greatest Hits	1976	Rock	42

Figure 10-4: Table with row span

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Using Table Headers and Footers

- Rows can be grouped into head, body, and footer sections using the `<thead>`, `<tbody>`, and `<tfoot>` elements
- You can style these table sections with CSS

Using Table Headers and Footers

```
<style>
thead {
font-family: arial;
background-color: #ccddee;
}
tfoot {
background-color: #ddccee;
font-family: times, serif;
font-size: .9em;
font-style: italic;
} </style>
```

http://alkhate.myweb.cs.uwindsor.ca/60270/ch10/table_Header_Footer_Styles.html



The screenshot shows a web browser window with a single tab titled "Best-Selling Albums World...". The browser's address bar is empty, and the page content displays a table titled "Table 1-2: Best-Selling Albums Worldwide". The table has five columns: "Artist", "Album", "Released", "Genre", and "Sales (millions)". It lists five albums: Michael Jackson's "Thriller" (1982, Pop, 110M), AC/DC's "Back in Black" (1980, Hard Rock, 49M), Pink Floyd's "The Dark Side of the Moon" (1973, Rock, 45M), Whitney Houston's "The Bodyguard" (1992, Soundtrack, 44M), and Eagles' "Greatest Hits" (1976, Rock, 42M). Below the table, there is a note about data accuracy and a source link to a Wikipedia page.

Artist	Album	Released	Genre	Sales (millions)
Michael Jackson	Thriller	1982	Pop	110
AC/DC	Back in Black	1980	Hard Rock	49
Pink Floyd	The Dark Side of the Moon	1973	Rock	45
Whitney Houston	The Bodyguard	1992	Soundtrack	44
Eagles	Greatest Hits	1976	Rock	42

Note: A number of issues make exact figures difficult to calculate, as historical data before the 1980s and from developing countries is incomplete.

Source: http://en.wikipedia.org/wiki/List_of_best-selling_albums_worldwide

Figure 10-5: Table with styled headers and footers

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Break Points

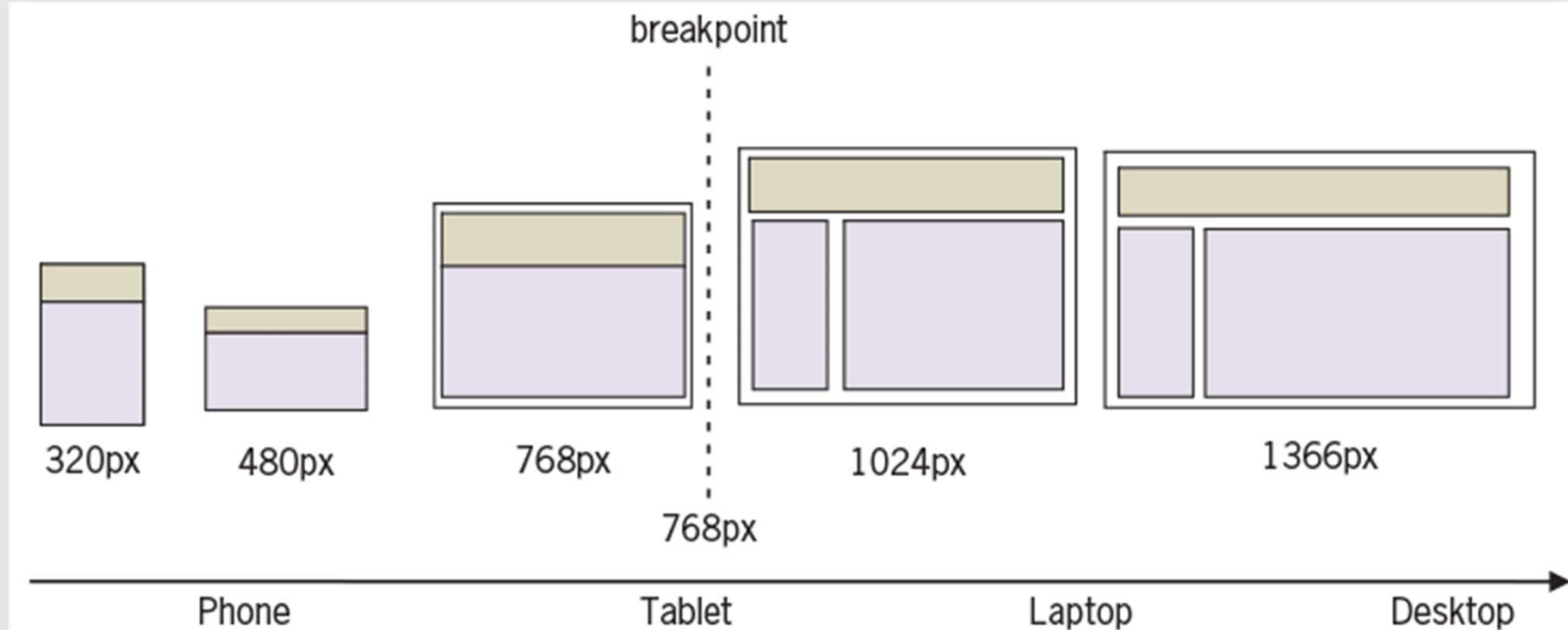


Figure 12-3: Different page designs to adapt content to different devices

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Recognizing the Need for Responsive Web Design

- Use CSS style rules to change the order, positioning, and other display characteristics of your page elements
- Build one basic layout and then use style rules targeted to **different screen sizes**

Using Media Queries to Apply Conditional Styles

Figure 12-5:

The media type is *screen* and the media feature is *max-width*. The max-width value is 480 pixels.

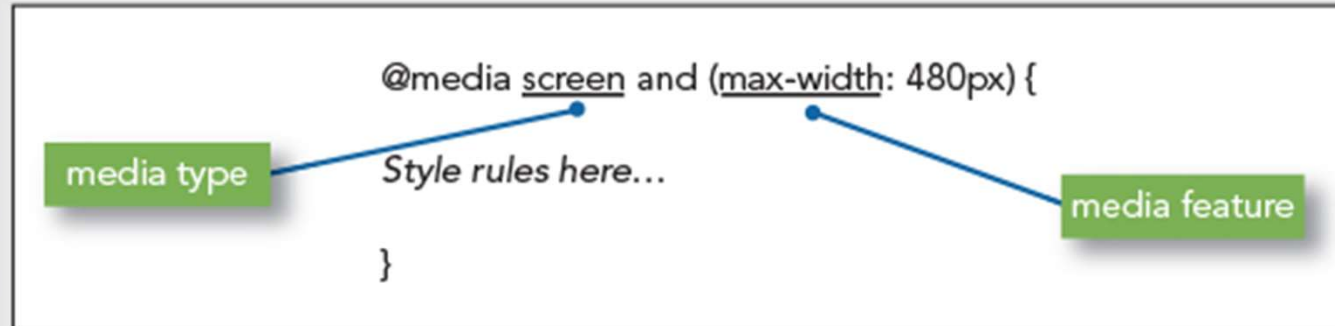


Figure 12-5: Media query syntax

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Setting the Viewport Scale

- The viewport is equal to the size of the browser window
- The viewport on handheld devices is much narrower than a desktop browser window
- The narrower viewport causes **problems** with responsive web pages.
- Include this meta tag to set the viewport:

```
<meta name="viewport" content="width=device-width, initial-scale=1.0">
```

References

- Principles of Web Design, 6th Edition, by Joel Sklar - Ch. 4,6,7,12. N.p., n.d. Web. 28 Dec. 2016 .
- <http://www.w3schools.com>
- <https://www.tutorialspoint.com/javascript/>
- <http://mydevice.io/devices/>