MORE HTML 5

Lessons 1: HTML5 semantic element

What are Semantic Elements?

- A semantic element clearly describes its meaning to both the browser and the developer.

- Examples of **semantic** elements: <form>, <table>, and <img> - Clearly defines its content.

- Examples of non-semantic elements: <div> and <span> - Tells nothing about its content.

- HTML5 offers some new elements, primarily for semantic purposes. The elements include: section, article, aside, header, footer, nav, figure, figcaption, time, mark, main.
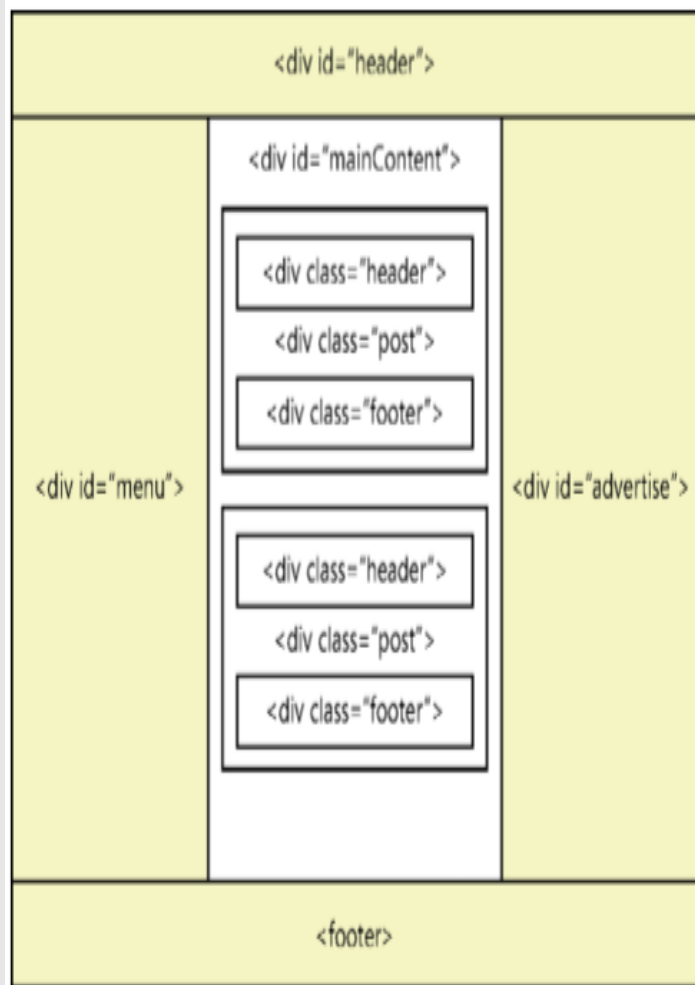
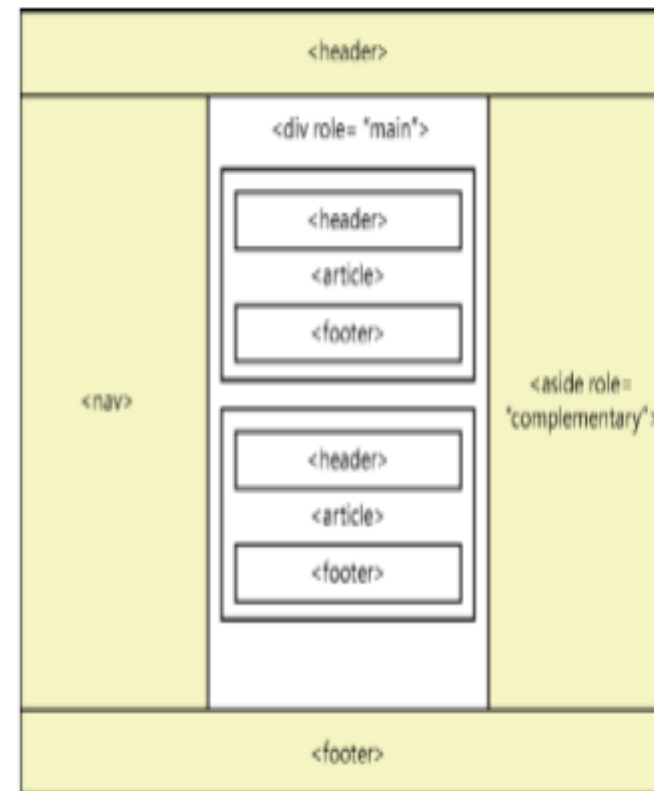**FIGURE 5-2** A blog site layout container using <*div*> elements

FIGURE 5-3 Layout container example, using the new HTML5 elements

In Figure 5-3, all <*div*> elements have been replaced with the new HTML5 elements.

- <header> Defines a section that provides a header. You can use the <header> element at the top of your HTML document as a page header. You can also use the <header> element in the <article> element.

- <footer> Defines a section that provides a footer. You can use the <footer> element at the bottom of your HTML document as a page footer. You can also use the <footer> element in the <article> element.

- <nav> Defines a section that houses a block of major navigational links.

- <aside> Defines a section of content that is separate from the content the <aside> element is in. This is typically used for sidebars.

- <section> Part of the whole that is typically named with an <h1> to <h6> element internal element

- <article> A unit of content that can stand on its own and can be copied to other locations. A blog post is a good example of an article. Figure 5-3 shows how these elements might be applied to create a layout container.

Lessons 2: Table

```
<table>
   <tr>
     <td>1957</td>
     <td>Ford</td>
     <td>Thunderbird</td>
   </tr>
   <tr>
     <td>1958</td>
     <td>Chevrolet</td>
     <td>Impala</td>
   </tr>
   <tr>
     <td>2012</td>
     <td>BMW</td>
     <td>Z4</td>
   </tr>
   <tr>
     <td>2003</td>
     <td>Mazda</td>
     <td>Miata</td>
   </tr>
</table>
```

- The <table> tag defines an HTML table.
- An HTML table consists of the <table> element and one or more <tr>, <th>, and <td> elements.
- The <tr> element defines a table row, the <th> element defines a table header, and the < td> element defines a table cell.
- A more complex HTML table may also include <caption>, <col>, <colgroup>, <thead>, < tfoot>, and <tbody> elements.

- HTML tables are powerful and, due to their flexibility, they are often misused.

- It's important to understand both proper table implementation and where it's inappropriate to implement a table.

- Over the years, many developers have used the <table> element to create a page layout. Here are some reasons you should not use the <table> element to create a page layout.

- The table will not render until the </table> tag has been read.

- Webpages should be written with semantic markup, and the main <div role="main"> element should be as close to the top of the HTML document as possible.

- The <div> element will render its content as the browser receives it. This enables the user to read the content as it's being loaded into the browser.

- Using a table forces you into a deeply nested HTML structure that is difficult to maintain.

- Using a table confuses accessibility devices. Remember that using a <table> element for anything other than tabular layout of data will be much more difficult to maintain than using <div> elements with positioning.

- Refrain from using the <table> element for page layout.
- A <tr> element creates a table row.
- A <td> element creates a table cell in a table row.
- To identify a header cell, use the <th> element instead of using the <td> element.
- Use the <thead> element to specify table rows that comprise the table header.
- Use the <tfoot> element to specify table rows that comprise the table footer.
- Use the <tbody> element to specify data rows. You can group data rows by specifying many <tbody> elements.
- Use the rowspan and colspan attributes on the <th> and <td> elements to create irregular tables.
- Use the <caption> element directly after the <table> element to specify a caption for your table.
- Use the <colgroup> and <col> elements to apply styles to a column.

Few additional Web sites to check

Look up HTML5, CSS3, etc features, know if they are ready for use, and if so find out how you should use them –

http://html5please.com/

Compatibility tables for support of HTML5, CSS3, SVG and more in desktop and mobile browsers.

http://caniuse.com/

http://html5test.com

http://html5doctor.com

http://validator.w3.org/

http://jigsaw.w3.org/css-validator/

http://en.wikipedia.org/wiki/WHATWG