Chapter 15

Division and Span in CSS

Division

<div>….</div> Tag

The <div> tag is known as Division tag. The div tag is used in HTML to make divisions of content in the web page like (text, images, header, footer, navigation bar, etc). Div tag has both open(<div>) and closing (</div>) tag and it is mandatory to close the tag. The Div is the most usable tag in web development because it helps to organize data in the web page systematically.

* Div tag is Block level tag
* It is a generic container tag
* It is used to the group of various tags of HTML so that sections can be created and style can be applied to them.

DIV is a block-level element that, in function, is similar to the SPAN. But DIV may contain paragraphs, headings, and tables. For example:

<DIV CLASS=zn>

<H1>Welcome</H1>

<P>Hello World</P>

<P>Welcome to my website!</P>

</DIV>

Properties of <Div> Tag

Color

You can declare a color as the following example:

P {color: red}

H2 { color: #000080 }

LI {color: rgb(12%, 51%, 62%)}

Background

Background-color This sets the background color of an element. For example:

BODY { background-color: white }

H1 { background-color: #000080 }

Note:  
1. To help avoid conflicts with user style sheets, background-image should be specified whenever background-color is used. In most cases, background-image: none is suitable.  
2. Netscape 4.\* does not color in the background of block elements if they are given a background color that is different from BODY - it does not color in the spaces between words. To avoid this, explicitly set border: none

Background-image Specified with background-image. For example:

BODY { background-image: url(/images/cloud.gif) }

P { background-image: url(http://www.internetcollege.com/bg1.gif) }

Background-repeat This states the tiling of the background image. The possible values include: repeat | repeat-x | repeat-y | no-repeat.

The repeat-x value will repeat the image horizontally while the repeat-y value will repeat the image vertically. For example:

BODY { background: white url(candybar.gif);

background-repeat: repeat-x }

In the above example, the image will only be tiled horizontally. IE only draws repeat-x to the right, and repeat-y down, not left and right and up and down as it should do.

Background This allows one or more of the properties to be specified in the order color, image, repeat, attachment, position. For examples:

BODY { background: white url(http://www.internetcollege.com/bg1.gif) }

BLOCKQUOTE { background: #6699ff }

P { background: url(image/line.gif) #e2e9ee fixed }

TABLE { background: #ffeeffurl(house.gif) no-repeat top center }

Fonts

Font-family This allows a specific font to be used. For example:

P { font-family: Times }

You may specify a couple fonts separated by comma. In case that if your preferred font is not available, your second choice is used. For example, font-family: Times, Arial. Note that any font name containing whitespace must be quoted, with either single or double quotes. For example:

P { font-family: "New Times Roman", Times, serif }

Font-size This can be specified as a length, or one of the following keywords: xx-small, x-small, small, medium (initial), large, x-large, xx-large. For example:

H2 { font-size: large }

P { font-size: 10pt }

LI { font-size: 80% }

Table { font-size: small}

Note: Internet Explorer 3 and Netscape 4.\* treat all relative units and % as relative to the element default rather than as relative to the parent element.

Font-style This defines that the font be displayed in one of three ways: normal, *italic* or *oblique* (slanted). For example:

P {font-style: italic}

Font-weight This is used for specifying the weight of the font that can be specified as normal (initial value), or bold. For example:

P {font-weight: bold}

It can also be specified as an absolute number, being one of 100, 200, 300, 400 (the same as normal), 500, 600, 700 (the same as bold), 800, or 900, where 100 is the lightest and 900 the most bold. For example:

H1 { font-weight: 800 }

Font This may be used as a shorthand for the various font properties. For example:

P { font: italic bold 12pt/14pt Times, serif }

This specifies paragraphs with a bold and italic Times or serif font with a size of 12 points and a line height of 14 points.

Text

Text-align The value can be left (initial value), right, center, or justify (aligns to both margins). Text-align only applies to block elements and is inherited. For example:

H1 { text-align: center }

P.newspaper{ text-align: justify }

Text-decoration This allows text to be decorated through one of five properties:

<span style="text-decoration: underline"="">underline, <span style="text-decoration: overline"="">overline, <span style="text-decoration: line-through"="">line-through, <span style="text-decoration: blink"="">blink, or the default, <span style="text-decoration: none"="">none. For example:

A:link, A:visited, A:active { text-decoration: none }

Text-transform allows text to be transformed by one of four properties: none (initial value), lowercase, uppercase, or capitalize (capitalize the first letter of every word). It applies to all elements and is inherited. For example:

H1 { text-transform: uppercase }

H2 { text-transform: capitalize }

Margin

This property sets the margin of an element by specifying a length or a percentage. Each element can have four margins - left, right, bottom and top. These are defined by the margin-left, margin-right, margin-top, margin-bottom properties. For example:

P {margin-left: 20px}

The margins can be specified for all four sides at once with the margin shorthand. Margins can be negative, and initially margins are 0.

P {margin: 10px 12px 6cm 8pt}

This would give P a top margin of 10 pixel, a right margin of 12 pixel, a bottom margin of 6 pixel and a left margin of 8 pixel.

Rules

Inheritance Basically a selector which is nested within another selector will inherit the property values assigned to the outer selector. For example, a font defined for the BODY will also be applied to text in a paragraph.

! important A style can be designated as important by specifying ! important. A style that is designated as important will win out over contradictory styles of otherwise equal weight. A ! important statement like this:

BODY { background: url(man.gif) white; background-repeat: repeat-x ! important }

The weight sort The weight sort sorts declarations according to their weight. Declarations can have normal weight or important weight. Declarations are made important by the addition of !important (or ! important). For example:

P {font-size: 36pt !important} P {font-size: 16pt}

36 pt will result because that declaration has greater weight.

The order sort When two rules have the same weight, the last rule specified wins. Thus:

P {color: red}

P {color: green}

It would result in green.

Case sensitivity All CSS is case insensitive.

In the below example div tag contain entire width, it will be displayed div tag each time on a new line, not on the same line.

* **Example 1:**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| <html>     <head>        <title>BSSS</title>  <style type=text/css>  p{    background-color:gray;    margin: 10px;  }  div  {    color: white;    background-color: 009900;    margin: 2px;    font-size: 25px;  }  </style>    </head>     <body>     <div > Section A </div>     <div > Section B</div>     <div > Section C</div>     <div > Section D</div>  </body>  </html>  The above HTML document will produce the following result –    Span  <span>..</span> Tag  The HTML <span> element is a generic inline container for phrasing content, which does not inherently represent anything. It can be used to group elements for styling purposes (using the class or id attributes), or because they share attribute values, such as lang. It should be used only when no other semantic element is appropriate. <span> is very much like a <div> element, but <div> is a block-level element whereas a <span> is an inline element.  This element may be used as a selector in a style sheet, and it also accepts the STYLE, CLASS, and ID attributes. Some examples of SPAN follow:  <!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0//EN">  <HTML><HEAD><TITLE></TITLE>  <META HTTP-EQUIV="Content-Style-Type" CONTENT="text/css">  <STYLE TYPE="text/css">  <!--  .zn { font-size: 28pt }  -->  </STYLE>  </HEAD>  <BODY>  <P><SPAN CLASS=zn>These words could be big.</SPAN></p>  <p><SPAN STYLE="font-family: Arial;font-size:12"> And these ones are different.</SPAN>.</P>  </BODY></HTML>    Difference Between <Div> tag and <span> tag  The div and span tag are two common tags when creating pages using HTML and perform different functionality on them while div tag is a block level element and span is inline element The div tag creates a line break and by default creates a division between the text that comes after the tag as begun and until the tag ends with </div>. div tag creates separate boxes or containers for all elements inside this tag like text, images, paragraphs.   |  |  |  | | --- | --- | --- | | Properties | Div Tag | Span Tag | | Element Type | Block-Level | Inline | | Space/Width | Contain Whole Width Available | Takes only required Width | | Examples | Headings, Paragraph, form | Attribute, image | | Uses | Web-layout | container for some text | | Attributes | Not required, with common css, class | Not required, with common css, class |   The span tag does not create a **line break** similar to a div tag, but rather allows the user to separate things from other elements around them on a page within the same line. avoiding of line break, results only that selected text to change, keeping all the other elements around them same. Below example will display the difference between span and div tag while div tag contains whole width and span tag contains only required width and rest parts are free for another element.   * **Example 2:**  |  |  | | --- | --- | | <html>     <head>        <title>BSSS</title>        <style type=text/css>           p{           background-color:gray;           margin: 10px;           }             div           {           color: white;           background-color: 009900;           margin: 2px;           font-size: 25px;           }           span           {           color: black;           background-color: gray;           margin: 5px;           font-size: 25px;           }        </style>     </head>   |  | | --- | | <body>  <!-- below some div tags -->          <div > div tag   </div>        <div > div tag   </div>        <div > div tag   </div>        <div > div tag   </div>  <!-- below some span tags -->        <span>span-tag</span>        <span>span-tag</span>        <span>span-tag</span>        <span>span-tag</span>     </body>  </html> |   The above HTML document will produce the following result –         <body>  <!-- below some div tags -->          <div > div tag   </div>        <div > div tag   </div>        <div > div tag   </div>        <div > div tag   </div>    <!-- below some span tags -->        <span>span-tag</span>        <span>span-tag</span>        <span>span-tag</span>        <span>span-tag</span> | |

As we know div tag is used for grouping HTML elements together and is to apply CSS and web layout on them. Lets see below example without using div tag. we need to applying CSS for each tag (in the example using **H1 H2** and two paragraphs **p** tags)

* **Example 3:**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| <html>     <head>        <title>BSSS</title>        <style type=text/css>           p{           color: white;           background-color: 009900;           width: 400px;           }           h1           {           color: white;           background-color: 009900;           width: 400px;           }           h2           {           color: white;           background-color: 009900;           width: 400px;           }  </style>     </head>     <body>        <h1>The Bhopal School of Social Sciences</h1>        <p>  BSSS, Bhopal is a NAAC Re-accredited Autonomous College under the UGC Scheme with ‘A’ Grade (CGPA 3.27). It is situated in Bhopal near Habibganj railway crossing, opposite DRM Office.        </p>        <h2> The Department of Computer Applications </h2>  <p> BCA course was initiated at BSSS College in the academic year 1999 with the introduction of BCA course in Barkatullah University, Bhopal. The BCA course at BSSS is extremely sought after by the student community. The department has state-of-the-art computer laboratories as well as qualified and experienced faculty members to cater to the requirements of the students.        </p>        <p> The BCA Program is designed for students who are interested in pursuing rewarding careers in the field of IT. The program encompasses foundation courses, core subject dealing with latest tools and techniques, with an optimal blend of theory and practical. The BCA program provides a good ground in basic subjects.        </p>        <p> The Department of Computer Applications runs a very active Cyber Club which organizes co-curricular and extra-curricular activities for bringing out the hidden talents of students.        </p>     </body>  </html>  The above HTML document will produce the following result –    **Creating Web Layout using Div Tag**  The div tag is a container tag inside div tag we can put more than one HTML element and can group together and can apply CSS for them.  div tag can be used for creating a layout of web pages in the below examples shows creating a web layout we can also create web layout using tables tag but table tags are very complex to modify the layout The div tag is very flexible in creating web layouts and easy to modify. in below example will show grouping of HTML element using div tag and create block-wise web layout.   * **Example 4:**  |  | | --- | | <html>     <head>        <title>BSSS</title>        <style type=text/css>           .leftdiv           {           float: left;           }           .middlediv           {           float: left;           background-color:gray           } |            .rightdiv           {           float: left;           }           div{           padding : 1%;           color: white;           background-color: 009900;           width: 30%;           border: solid black;           }        </style>     </head>     <body>        <div class="leftdiv">           <h1>The Bhopal School of Social Sciences</h1>        <p>  BSSS, Bhopal is a NAAC Re-accredited Autonomous College under the UGC Scheme with ‘A’ Grade (CGPA 3.27). It is situated in Bhopal near Habibganj railway crossing, opposite DRM Office.        </p>        <h2> The Department of Computer Applications </h2>  <p> BCA course was initiated at BSSS College in the academic year 1999 with the introduction of BCA course in Barkatullah University, Bhopal. The BCA course at BSSS is extremely sought after by the student community. The department has state-of-the-art computer laboratories as well as qualified and experienced faculty members to cater to the requirements of the students.        </p>        <p> The BCA Program is designed for students who are interested in pursuing rewarding careers in the field of IT. The program encompasses foundation courses, core subject dealing with latest tools and techniques, with an optimal blend of theory and practical. The BCA program provides a good ground in basic subjects.        </p>        <p> The Department of Computer Applications runs a very active Cyber Club which organizes co-curricular and extra-curricular activities for bringing out the hidden talents of students.        </p>        </div>        <div class="middlediv">         <h1>The Bhopal School of Social Sciences</h1>        <p>  BSSS, Bhopal is a NAAC Re-accredited Autonomous College under the UGC Scheme with ‘A’ Grade (CGPA 3.27). It is situated in Bhopal near Habibganj railway crossing, opposite DRM Office.        </p>        <h2> The Department of Computer Applications </h2>  <p> BCA course was initiated at BSSS College in the academic year 1999 with the introduction of BCA course in Barkatullah University, Bhopal. The BCA course at BSSS is extremely sought after by the student community. The department has state-of-the-art computer laboratories as well as qualified and experienced faculty members to cater to the requirements of the students.        </p>        <p> The BCA Program is designed for students who are interested in pursuing rewarding careers in the field of IT. The program encompasses foundation courses, core subject dealing with latest tools and techniques, with an optimal blend of theory and practical. The BCA program provides a good ground in basic subjects.        </p>        <p> The Department of Computer Applications runs a very active Cyber Club which organizes co-curricular and extra-curricular activities for bringing out the hidden talents of students.        </p>  </div>        <div class="rightdiv">           <h1>The Bhopal School of Social Sciences</h1>        <p>  BSSS, Bhopal is a NAAC Re-accredited Autonomous College under the UGC Scheme with ‘A’ Grade (CGPA 3.27). It is situated in Bhopal near Habibganj railway crossing, opposite DRM Office.        </p>        <h2> The Department of Computer Applications </h2>  <p> BCA course was initiated at BSSS College in the academic year 1999 with the introduction of BCA course in Barkatullah University, Bhopal. The BCA course at BSSS is extremely sought after by the student community. The department has state-of-the-art computer laboratories as well as qualified and experienced faculty members to cater to the requirements of the students.        </p>        <p> The BCA Program is designed for students who are interested in pursuing rewarding careers in the field of IT. The program encompasses foundation courses, core subject dealing with latest tools and techniques, with an optimal blend of theory and practical. The BCA program provides a good ground in basic subjects.        </p>        <p> The Department of Computer Applications runs a very active Cyber Club which organizes co-curricular and extra-curricular activities for bringing out the hidden talents of students.        </p>        </div>     </body>  </html>  Using Div tag we can cover gap between heading tag and paragraph tag in this example will display three blocks web layout.  The above HTML document will produce the following result –    CSS can be used in any divisions using the following methods:  **1. Using class:** we can use Class on that particular div either in internal CSS or external CSS.  **In case of internal CSS:** we need to define Class in the **<head>**section of HTML within **<style>** element.  **In case of External CSS:** we need to create a separate .css file and include it in HTML code in **<head>** section using **<link>**element.  The class name should be different from other class names in other div otherwise the CSS used in one div can affect another division.   * Example 5:  |  | | --- | | <html>     <head>        <link rel="stylesheet" href="color.css">        <title>           BSSS        </title>     </head>     <body>        <center> |  |  | | --- | | <div class="color">              <!--open tag of Div!-->              <caption>                 <h1>THE BHOPAL SCHOOL OF SOCIAL SCIENCES</h1>              </caption>              <h1>Inline CSS is not  USED in THIS method.              </h1>           </div>           <!--closing tag of Div!-->        </center>     </body>  </html>  The above HTML document will produce the following result – |  * CSS for color class: File name **color.css**  |  | | --- | | .color  {  height:400px;  width:600px;  border:1px solid;  background-color: 009900;  } |   In this example, we used a class to that particular Div. with name color.css which properties of div. It is a separate file which is linked by link tag in this HTML code  The above HTML document will produce the following result –    **Inline CSS:**  we can directly use CSS in div also this method does not require of CLASS. Div in HTML coding is used as a container tag also because it is the one that can contain all other tags.   |  | | --- | | * Example 6:   <html>     <head>        <title>           BSSS        </title>     </head>     <body>        <center>           <div style="height:300px; width:500px; color:white;              border:1px solid; background-color: 009900;">              <!--open tag of Div!--> | | <**caption**>  <**h1**>THE BHOPAL SCHOOL OF SOCIAL SCIENCES</**h1**>              </**caption**>  <**h1**>Inline CSS is USED in THIS method.                 In this div no class is used.  </**h1**>  </**div**>           <!--closing tag of Div!-->       </**center**>   </**body**>  </**html**> | |   In this method, we applying inline CSS in the div tag. By using style attribute this style will apply to that particular div.  The above HTML document will produce the following result – |