

Session: 6

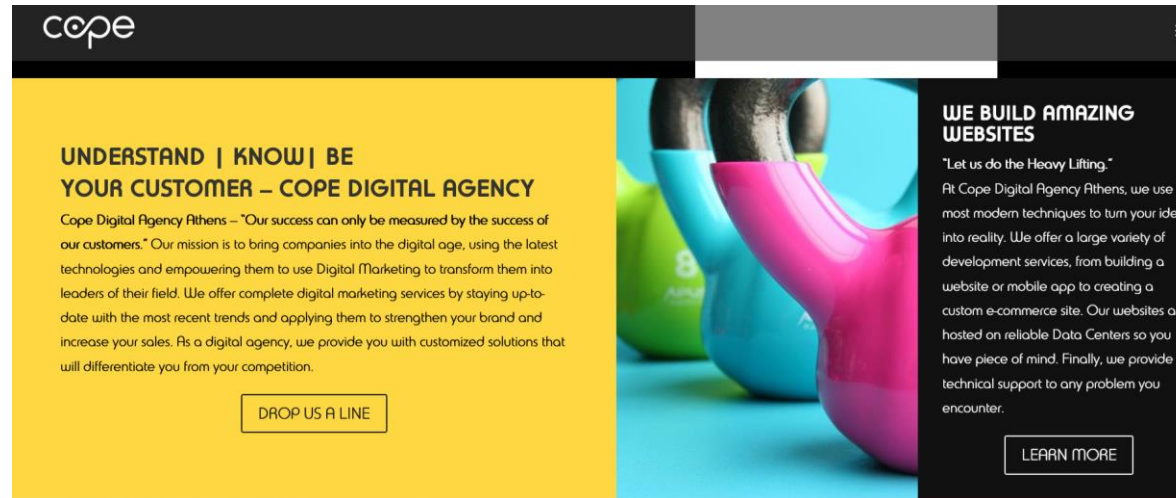
Formatting Using Style Sheets

Objectives

- List and explain text and font styles
- Describe inline spans
- Explain paragraph indentation and application of border
- Explain horizontal paragraph alignment
- Explain vertical spacing within a paragraph
- Describe selector specificity and pseudo selectors
- Explain box model
- Illustrate the use of positioning and float property

Introduction

In modern Web designing, style sheets allow various styles for formatting menus, texts, borders, or paragraphs.



Text Properties

Property	Description
color	Specifies the color of the text.
text-align	Specifies the horizontal alignment of text in an element.
text-decoration	Specifies the decoration of the text in an element.
text-indent	Specifies the indentation of first line of text in an element in length or %.
text-transform	Specifies the casing of text in an element.
word-spacing	Increases or decreases the space between words.

Font Properties

Property	Description
<code>font-family</code>	Specifies the font and generic family or a specific family name such as 'Serif' or 'Times New Roman'.
<code>font-size</code>	Specifies the size of the font and can have an absolute or relative value.
<code>font-style</code>	Specifies the style of the font.
<code>font-variant</code>	Specifies whether the text should be displayed in small-caps.

Text Styles 1-3

text-align Property

Property	Description
left	Aligns the text to the left of the Web page.
right	Aligns the text to the right of the Web page.
center	Aligns the text in the middle of the Web page.
justify	Justifies the text on both sides of the Web page.

text-indent Property

Value	Description
length	Specifies fixed indentation. The default value is 0.
%	Specifies an indentation as a percentage of the width of the parent element. The parent element is the element within which the selector element is defined.

text-transform Property

Value	Description
none	Specifies that the text will be displayed with the same casing as written within the element.
capitalize	Specifies that the first letter of each word will be capitalized.
uppercase	Specifies only uppercase letters.
lowercase	Specifies only lowercase letters.

Text Styles 2-3

```
<!DOCTYPE HTML>
<html>
<head>
<link rel="stylesheet" type="text/css" href="TextProperties.css"/>
<title>Client</title>
</head>
<body>
<h2>Client Contact Information</h2>
<div>
<h4>Dynamic Solutions</h4>
<p>Tel Number -445 558 7744</p>
<p>Fax Number - 703 740 6539</p>
</div>
</body>
</html>
```

Client Contact Information

DYNAMIC SOLUTIONS

TEL NUMBER - 445 558 7744

FAX NUMBER - 703 740 6539

Output

Text Styles 3-3

text-decoration Property

Value	Description
none	Displays normal text without any formatting.
underline	Displays a line under the text.
overline	Displays a line over the text.
line-through	Displays a line through the text.
blink	Flashes the text.

word-spacing Property

Value	Description
normal	Specifies normal spacing between words and it is the default value.
length	Specifies fixed space between words.

```
<!DOCTYPE HTML>
<html>
<head>
<link rel="stylesheet" type="text/css"
href="ParaProperties.css"/>
<title>Solar System</title>
</head>
<body>
<h3>Nine Planets</h3>
<div>
<p>Mercury, Venus, Earth, Mars, Jupiter, Saturn,
Uranus, Neptune, Pluto</p>
</div>
</body>
</html>
```

Output

Nine Planets

Mercury, Venus, Earth, Mars, Jupiter, Saturn,
Uranus, Neptune, Pluto

Inline Span 1-2

Attribute	Value	Description
class	classname	Specifies the text direction for the content in an element.
dir	rtl ltr	Specifies the text direction for the content in an element.
id	id	Specifies a unique id for an element.
lang	language_code	Specifies a language code for the content in an element.
style	style_definition	Specifies an inline style for an element.
title	text	Specifies extra information about an element.
xml:lang	language_code	Specifies a language code for the content in an element, in XHTML documents.

Different Attributes and Values Used in Tag

Inline Span 2-2

```
<p>My mother has <span style="color: lightblue">light blue</span>  
eyes.</p>
```

Or

```
<span class="eyesonly">light blue</span>
```

My mother has blue eyes.

Output

Indenting Paragraph 1-3

- Indenting sets off the text from its normal position, either to the left or to the right.
- Three types of indentation: First line indent, Padding, and Margin

```
<!DOCTYPE HTML>
<html>
  <head>
    <title>Font Gallery</title>
  </head>
  <body>
    <p>The font styles properties allow you to specify the font for the text. They allow you to change the
different font attributes of the text such as font, size, and style of the text. The browser must
support the font specified by the font properties. Otherwise, it will display the default font,
which is dependent on the browser.</p>
  </body>
</html>
```

Indenting Paragraph 2-3

```
<!DOCTYPE HTML>
<html>
  <head>
    <title>Font Gallery</title>
  <style>
    p {padding: 20px }
  </style>
</head>

  <body>
    <p>

The font styles properties allow you to specify the font for the text. They allow you to change
the different font attributes of the text such as font, size, and style of the text. The browser
must support the font specified by the font properties. Otherwise, it will display the default
font, which is dependent on the browser.

    </p>
  </body>
</html>
```

Padding

The font styles properties allow you to specify the font for the text. They allow you to change the different font attributes of the text such as font, size, and style of the text. The browser must support the font specified by the font properties. Otherwise, it will display the default font, which is dependent on the browser.

Output of Padding Property

Indenting Paragraph 3-3

Inline style

```
<p style="margin: 20px">
```

Internal CSS

```
p {margin: 20px}
```

margin

The font styles properties allow you to specify the font for the text. They allow you to change the different font attributes of the text such as font, size, and style of the text. The browser must support the font specified by the font properties. Otherwise, it will display the default font, which is dependent on the browser.

Margin Property

Border Style 1-3

border-style Properties	Description
border-left-style	Sets an element's left border.
border-right-style	Sets an element's right border.
border-top-style	Sets an element's top border.
border-bottom-style	Sets an element's bottom border.

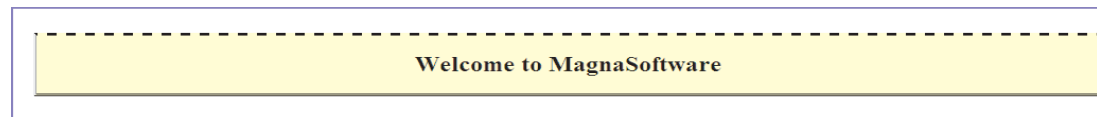
border-style Properties

Value	Description
dashed	Specifies a dashed border.
dotted	Specifies a dotted border.
double	Specifies two borders.
groove	Specifies a 3D grooved border.
inset	Specifies a 3D inset border.
outset	Specifies a 3D outset border.
ridge	Specifies a ridged border.
solid	Specifies a solid border.

Values of the border-style Properties

Border Style 2-3

```
<!DOCTYPE HTML>
<html>
<head>
<link rel="stylesheet" type="text/css" href="Styles.css"/>
<title>MagnaSoftwares</title>
</head>
<body>
<div id="heading">
<h2>Welcome to MagnaSoftwares</h2>
</div>
</body>
</html>
```



**Output of border-style
Properties**

Border Style 3-3

CSS code for shorthand border-style properties

```
<!DOCTYPE HTML>
<html>
<head>
<link rel="stylesheet" type="text/css" href="Styles1.css"/>
<title>Corpse - World's Largest Flower</title>
</head>
<body>
<figure></figure>
<h2>World's Largest Flower </h2>
<p>Corpse flower is the world's
largest flower.<br/> Its diameter is
about a meter. .<br/>
It grows in openings in rainforests on limestone hills of
Sumatra, Indonesia.</ p>
</body>
</html>
```



World's Largest Flower

Corpse flower is the world's largest flower.
Its diameter is about a meter. .
It grows in openings in rainforests on limestone hills of Sumatra, Indonesia.

Output of Shorthand border-style Properties

Border Color 1-2

border-color Properties

Property	Description
border-bottom-color	Specifies color for the bottom border.
border-left-color	Specifies color for the left border.
border-right-color	Specifies color for the right border.
border-top-color	Specifies color for the top border.

Values of border-color Properties

Value	Description
color	Specifies color to be applied to the border by using either the RGB or hexadecimal value, or the color name itself.
transparent	Specifies that the border is transparent.

Border Color 2-2

```
<!DOCTYPE HTML>
<html>
<head>
<link rel="stylesheet" type="text/css"
href="StylesNew.css"/>
<title>HealthCare</title>
</head>
<body>
<div class="tips">
<h2>Five Essential Health Tips</h2>
<ol>
<li>Quit Smoking</li>
<li>Reduce stress</li>
<li>Protect Yourself from Pollution</li>
<li>Avoid Excessive Drinking</li>
<li>Exercise Regularly</li>
</ol>
</div>
</body>
</html>
```

Five Essential Health Tips

1. Quit Smoking
2. Reduce stress
3. Protect Yourself from Pollution
4. Avoid Excessive Drinking
5. Exercise Regularly

Output

Border Width 1-3

Values of border-width Properties

Property	Description
<code>border-bottom-width</code>	Specifies width of the bottom border.
<code>border-left-width</code>	Specifies width of the left border.
<code>border-right-width</code>	Specifies width of the right border.
<code>border-top-width</code>	Specifies width of the top border.

border-width Properties

Value	Description
<code>medium</code>	Specifies a medium border.
<code>length</code>	Accepts an explicit value that specifies the thickness of border.
<code>thick</code>	Displays a thick border.
<code>thin</code>	Specifies a thin border.

Border Width 2-3

```
.banner
{
text-align:center
;
background:#C0C0C0;
border-style:solid;
border-left-style: none;
border-right-style: none;
border-top-width: thick;
border-bottom-width: thick;
font-family: fantasy;
}
```

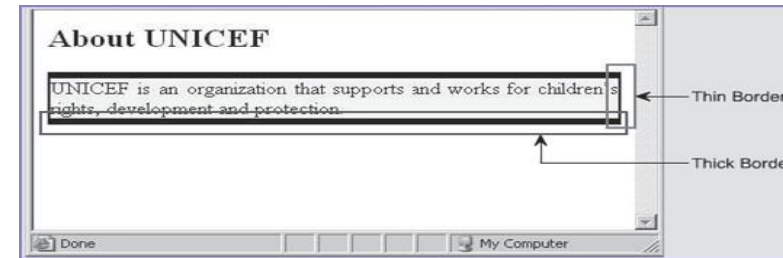


Output of border-width Properties

Border Width 3-3

Shorthand property: border-width

```
.aboutus
{
background-
color:
#FFFFCC;
text-align:
justify;
border-style:
solid;
border-width: thick thin thick thin;
}
```



Output of Shorthand Code of border-width Properties

Shorthand Border 1-2

Value	Description
border-bottom	Specifies width, style, and color for the bottom border.
border-left	Specifies width, style, and color for the left border.
border-right	Specifies width, style, and color for the right border.
border-top	Specifies width, style, and color for the top border.

Shorthand Border Properties

```
.imprnote
{
background-color: #FFFFCC;
border-top: dashed thin #FF0000; border-bottom:
ridge thick #0000FF; border-right: dotted thin
#FF8040; border-left: inset medium #FF00FF;
}
ul{
list-style: square;
}
```

Notice:

- Mobiles are not allowed during class hours.
- Each student should carry his/her identity card regularly.

Output of Border Properties

Shorthand Border 2-2

```
<!DOCTYPE HTML>
<html>
<head>
<title>Flower Gallery</title>
<style>
.flower{
border:solid thin #FF0000;
}
</style>
</head>
<body>
<h2>Flower Gallery</h2>
<table>
<tr>
<td></td>
<td valign="top"><h1>Lilac is a species of flowering plants in the olives
family. They are shrubs that range from 2 to 10m in height.</h1>
</td>
</tr>
<td></
td>
<td valign="top"><h1>Sunflower is a flowering plant whose stem can grow as high as 3m.</h1>
</td>
</tr>
</table>
</body>
</html>
```

Horizontal Alignment

Value	Description
left	Aligns the text to the left.
right	Aligns the text to the right.
center	Centers the text.
justify	Aligns text to both left and right margins by adding space between words (such as in newspapers and magazines).
inherit	Specifies that the value of the text-align property should be inherited from the parent element.

Values of text-align Properties

Vertical Alignment

Value	Description
normal	A normal line height. This is default.
number	A number that will be multiplied with the current font size to set the line height.
length	A fixed line height in px, pt, cm, and so on.
%	A line height in percent of the current font size.
inherit	Specifies that the value of the line-height property should be inherited from the parent element.

Values of line-height Properties

Selector Specificity 1-2

- Selector specificity is the priority given to a selector on which style declarations will be applied.
 - There is a specificity hierarchy for selectors.
 - Four categories define the specificity level of a selector: Inline styles, IDs, Classes, attributes, and pseudo-classes, and Elements and pseudo-elements

```
p {color: yellow}
```


Selector

Selector Specificity 2-2

Rules	Example Code Snippet
If the rule is written twice, the lower rule will be applied.	<pre><!DOCTYPE html> <html> <head> <style> h1 {background-color: red;} h1 {background-color: yellow;} </style> </head> <body><h1>This is my line.</h1> </body> </html></pre>
ID selectors have a higher specificity than attribute selectors.	<pre><!DOCTYPE html> <html> <head> <style> div#a {background-color: yellow;} #a {background-color: blue;} div[id=a] {back- ground-color: red;} </style> </head> <body><div id="a">This is my line.</div> </body> </html></pre>

Rules	Example Code Snippet
Contextual selectors are more specific than a single element selector.	<p>CSS file:</p> <pre>#content h1 {back- ground- color: blue;} HTML file:</pre> <pre><style> #content h1 { background-color: red; } </style></pre>
A class selector is given preference to element selectors.	<pre><!DOCTYPE html> <html> <head> <style> .intro {background-color: blue;} h1 {background-color: red;} </style> </head> <body> <h1 class="intro">This is my line.</h1> </body> </html></pre>

Pseudo Selectors

Pseudo-Class Selectors	Example Code Snippet	Output
:hover	<pre><!DOCTYPE html> <html> <head> <style> div { background-color: green; color: white; padding: 25px; text-align: center; } div:hover { background-color: blue; } </style> </head> <body> <div>Place the mouse over here to change the color.</div> </body> </html></pre>	(Before Mouse Over)
		(After Mouse Over)
:before	<pre>#para{ font-size: 18px; } #para::before{ content: "- BEFORE -"; background-color: green; } #para::after{ content: "- AFTER -"; background-color: green;</pre>	

CSS Combinators

A combinator indicates the relationship between selectors.

```
<html>
<head>
<style> div + p {
background-color: gray;
}
</style>
</head>
<body>
<h2>Example of Adjacent Sibling Selector</h2>
<div>
<p>This is the first line.</p>
<p>This is the second line.</p>
</div>
<p>This is the third line.</p>
<p>This is the fourth line.</p>
<div>
<p>This is the fifth line.</p>
<p>This is the sixth line.</p>
</div>
<p>This is the seventh line.</p>
<p>This is the eighth line.</p>
</body>
</html>
```

Example of Adjacent Sibling Selector

This is the first line.

This is the second line.

This is the third line.

This is the fourth line.

This is the fifth line.

This is the sixth line.

This is the seventh line.

This is the eighth line.

Output of Using Adjacent Sibling Selector

Box Model

- Box model refers to the design and layout of HTML element.
- Includes margins, borders, padding, and content of the element.

```
<!DOCTYPE html>
<html>
<head>
<style> div {
width: 100px;
border: 5px solid red;
padding: 10px; margin: 0;
}
</style>
</head>
<body>
<div>Hi! Check the padding and border</div>
</body>
</html>
```



Output of Code Snippet



Output After Changing Padding Value

Positioning

- Use the position property to define the positioning method for an element.
- **Syntax:** `position: static|absolute|fixed|relative|sticky`

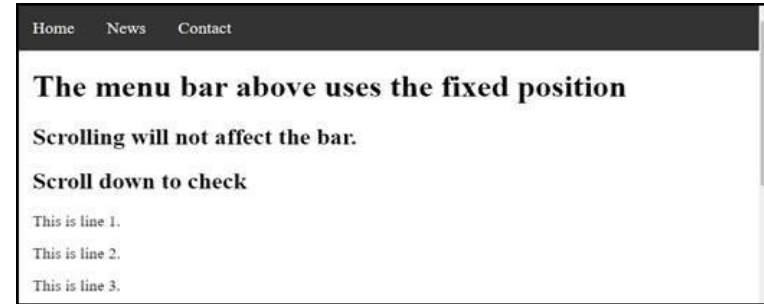
This line uses the static position.
This is the second line. When no position is specified, static becomes the default position.

Static

This is the closest parent element.

This is the relative position.

absolute

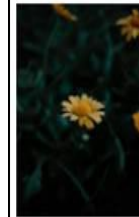


Fixed

Float

Use the float property to position and format content.

```
<!DOCTYPE html>
<html>
<head>
<style>
{
  float: left;
}
</style>
</head>
<body>
<p>
The two types of pollination are: self-pollination and cross-
pollination. Self-pollination happens when the pollen from the
anther is deposited on the stigma of the same flower, or
another flower on the same plant. Cross-pollination is the
transfer of pollen from the anther of one flower to the stigma
of another flower on a different individual of the same species.</p>
</body>
</html>
```



The two types of pollination are: self-pollination and cross-pollination. Self-pollination happens when the pollen from the anther is deposited on the stigma of the same flower, or another flower on the same plant. Cross-pollination is the transfer of pollen from the anther of one flower to the stigma of another flower on a different individual of the same species.

Output

Summary

- ❖ The text styles specify and control the appearance of the text in a Web page.
- ❖ Indenting is the process of offsetting text from its normal position, either to the left or to the right.
- ❖ CSS border properties specify the style, color, and width of the border.
- ❖ The border-color property accepts different color values that determine different shades of color to be applied to borders.
- ❖ Values of different border properties determine the type of effect to be applied to the borders.
- ❖ In CSS, the text-align property is used for horizontal alignment of text in an element.
- ❖ In CSS, the line-height property is used for vertical alignment of text in an element.
- ❖ Selector specificity can be used to prioritize a selector on which style declarations will be applied.
- ❖ A pseudo-class selector defines a particular state of an element.
- ❖ A combinator indicates the relationship between selectors.
- ❖ It is important to know about box model so that elements are displayed well in all browsers with respect to height and width.
- ❖ The position property can be used to position and format content.