



# Introduction to CSS

English Language Department

Class Code: **6fbyilf**

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# Web page without CSS Style

## Welcome to My Homepage

Use the menu to select different Stylesheets

- [Stylesheet 1](#)
- [Stylesheet 2](#)
- [Stylesheet 3](#)
- [Stylesheet 4](#)
- [No Stylesheet](#)

## Same Page Different Stylesheets

This is a demonstration of how different stylesheets can change the layout of your HTML page. You can change the layout of this page by selecting different stylesheets in the menu, or by selecting one of the following links:

[Stylesheet1](#), [Stylesheet2](#), [Stylesheet3](#), [Stylesheet4](#).

## No Styles

This page uses DIV elements to group different sections of the HTML page. Click here to see how the page looks like with no stylesheet:

[No Stylesheet](#).

## Side-Bar

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Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat. Ut wisi enim ad minim veniam, quis nostrud exerci tation ullamcorper suscipit lobortis nisl ut aliquip ex ea commodo consequat. Duis autem vel eum iriure dolor in hendrerit in vulputate velit esse molestie consequat, vel illum dolore eu feugiat nulla facilisis at vero eros et accumsan et iusto odio dignissim qui blandit praesent luptatum zzril delenit augue dui dolore te feugait nulla facilisi.

# Same Web page with CSS Style

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Use the menu to select different Stylesheets

Stylesheet 1

Stylesheet 2

Stylesheet 3

Stylesheet 4

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## Same Page Different Stylesheets

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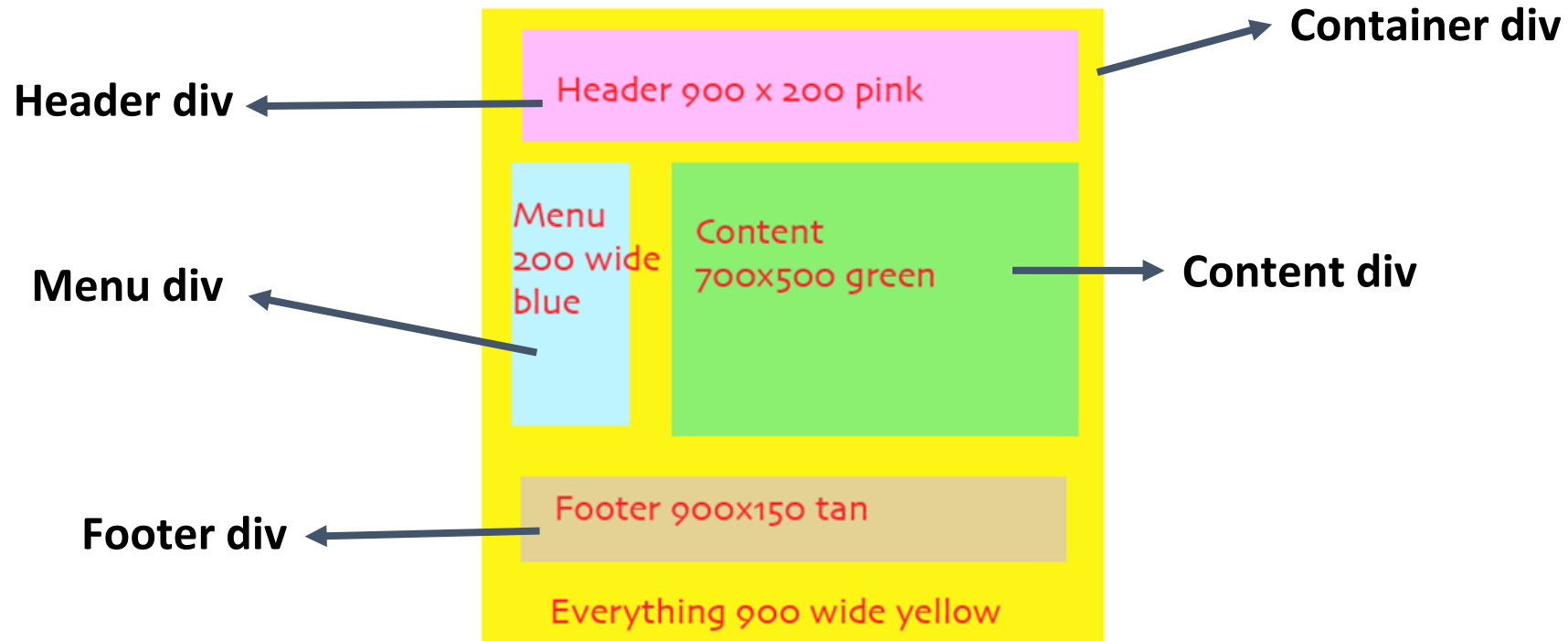
## Side-Bar

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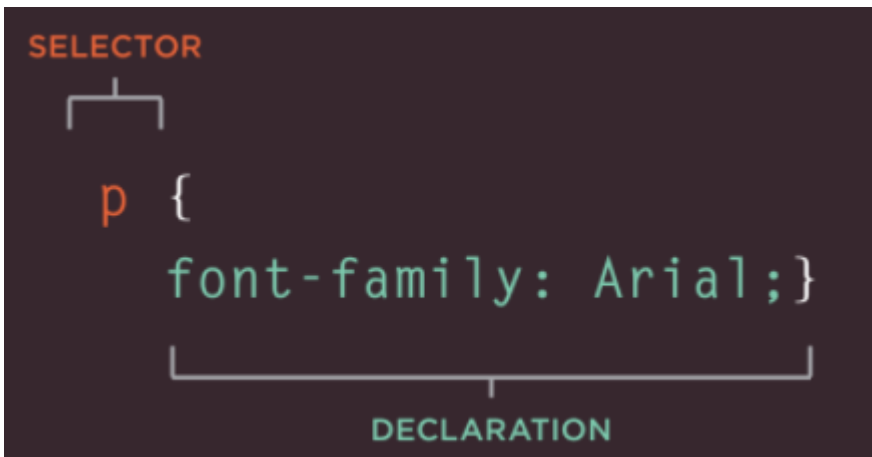
# HTML <div> tag

- The <div> tag defines a division or a section in an HTML document.
- The <div> tag is used as a container for HTML elements - which is then styled with CSS or manipulated with JavaScript.
- The <div> tag is easily styled by using the class or id attribute.
- Any sort of content can be put inside the <div> tag!



# What is CSS

- CSS stands for Cascading Style Sheets
- CSS describes how HTML elements are to be displayed on screen, paper, or in other media
- CSS saves a lot of work. It can control the layout of multiple web pages all at once
- we can give style to our web pages using inline styling or external styling
- External stylesheets are stored in CSS files
- CSS works by associating rules with HTML elements. These rules governs how the content of specific elements should be displayed. A CSS rule contains two parts: a **selector** and a **declaration**.



- This rule indicates that all `<p>` elements should be shown in the **Arial** typeface.
- **Selectors** indicate which element the rule applies to. The same rule can apply to more than one element if you separate the element names with commas.
- **Declarations** indicate how the elements referred to in the selector should be styled. Declarations are split into two parts (a **property** and a **value**), and are separated by a **colon**.

# More about *Selector* and *Declaration*

- CSS declarations sit inside curly brackets and each is made up of two parts: a property and a value, separated by a colon. You can specify several properties in one declaration, each separated by a semi-colon.
- This rule indicates that all <h1>, <h2>, and <h3> elements should be shown in the Arial typeface, in a yellow color.

```
h1, h2, h3 {  
    font-family: Arial;  
    color: yellow;}  
    _____  
    PROPERTY  VALUE
```

**Properties** indicate the aspects of the element you want to change. For example, color, font, width, height and border.

**Values** specify the settings you want to use for the chosen properties. For example, if you want to specify a color property then the value is the color you want the text in these elements to be.

# Using External CSS

- In this tutorial we are using external CSS. it means we should have a different file in the project folder with **.css** extension.
- We link the **CSS** file with **HTML** file using **<link>** element
- The element can be used in an HTML document to tell the browser where to find the CSS file used to style the page.
- To link an external stylesheet, you'd include a **<link>** element inside your **<head>**

```
<head>  
  
  <link href="test.css" rel="stylesheet" type="text/css">  
  
</head>
```

**href** This specifies the path to the CSS file (which is often placed in a folder called css or styles).

**type** This attribute specifies the type of document being linked to. The value should be text/css

**rel** This specifies the relationship between the HTML page and the file it is linked to. The value should be stylesheet when linking to a CSS file.

# CSS Comments

- A CSS comment is placed inside the `<style>` element, and starts with `/*` and ends with `*/`:
- You can add comments wherever you want in the code:

```
p {  
    color: red; /* Set text color to red */  
}
```

# CSS Colors

- Colors are specified using predefined color names, or RGB, HEX, HSL, RGBA, HSLA values.



- CSS/HTML support 140 standard color names and HEX values. click on the link to see them:
- [https://www.w3schools.com/colors/colors\\_names.asp](https://www.w3schools.com/colors/colors_names.asp)



# CSS Colors

**`rgb(red, green, blue)`**

Each parameter (red, green, and blue) defines the intensity of the color between 0 and 255.

**`#rrggbb`**

hexadecimal values between 00 and ff (same as decimal 0-255).

#000000 → Black

#ffffff → White

**`hsl(hue, saturation, Lightness)`**

Hue is a degree on the color wheel from 0 to 360. 0 is red, 120 is green, and 240 is blue.

Saturation is a percentage value, 0% means a shade of gray, and 100% is the full color.

Lightness is also a percentage, 0% is black, 50% is neither light or dark, 100% is white

`rgb(255, 99, 71)`

`#ff6347`

`hsl(9, 100%, 64%)`

# CSS Selectors

A CSS selector selects the HTML element(s) you want to style.

SELECTOR	MEANING	EXAMPLE
<b>Universal Selector</b>	Applies to all elements in the document	<b>* { }</b> Targets all elements on the page
<b>Element Selector</b>	Matches element names	<b>h1 { }</b> Targets the <p> elements
<b>Grouping Selector</b>	grouping selector selects all the HTML elements with the same style definitions	<b>h1, h2, h3, p { }</b> Targets the <h1>, <h2>, <h3>, and <p> elements
<b>Child Selector</b>	Matches an element that is a direct child of another	<b>li &gt; a { }</b> Targets any <a> elements that are children of an <li> element (but not other <a> elements in the page)

# CSS Selectors

SELECTOR	MEANING	EXAMPLE
<b>ID Selector</b>	Matches an element whose id attribute has a value that matches the one specified after the pound or hash symbol	<b>#introduction {}</b> Targets the element whose id attribute has a value of <b>introduction</b>
<b>Class Selector</b>	Matches an element whose class attribute has a value that matches the one specified after the period (or full stop) symbol	<b>.note {}</b> Targets any element whose class attribute has a value of <b>note</b> <b>p.note {}</b> Targets only <p> elements whose class attribute has a value of <b>note</b>
<b>Descendant Selector</b>	Matches an element that is a descendent of another specified element (not just a direct child of that element)	<b>p a {}</b> Targets any <a> elements that sit inside a <p> element, even if there are other elements nested between them

# CSS Backgrounds

Name	Description	Example
<b>background-color</b> <i>or</i> <b>background</b>	<ul style="list-style-type: none"><li>● specifies the background color of an element</li><li>● The <b>opacity</b> property specifies the opacity/transparency of an element. It can take a value from 0.0 - 1.0. The lower value, the more transparent:</li></ul>	<pre>div {   background-color: green;   opacity: 0.3; }</pre>
<b>background-image</b>	specifies an image to use as the background of an element.	<pre>body {   background-image:   url("bgdesert.jpg"); }</pre>

# CSS Backgrounds

Name	Description	Example
<b>background-repeat</b>	repeats an image both horizontally and vertically.	<pre>body {   background-image:   url("gradient_bg.png");   background-repeat: repeat-x; }</pre>
<b>background-position</b>	is used to specify the position of the background image.	<pre>body {   background-image:   url("img_tree.png");   background-position: right top; }</pre>
<b>background-attachment</b>	specifies whether the background image should scroll or be fixed (will not scroll with the rest of the page)	<pre>body {   background-image:   url("img_tree.png");   background-attachment: fixed; } }</pre>

# CSS Backgrounds

Name	Description	Example
<b>background - Shorthand property</b>	specify all the background properties in one single property	<pre>body {   background: #ffffff   url("img_tree.png") no-repeat   right top; }</pre>
<b>background-size</b>	Specifies the size of the background image(s)	<pre>#example2 {   background: url(mountain.jpg);   background-size: 300px 100px; }</pre>

# CSS Backgrounds

```
body {  
  background-color: #ffffff;  
  background-image: url("img_tree.png");  
  background-repeat: no-repeat;  
  background-position: right top;  
}
```



Using  
Shorthanded  
property

```
body {  
  background: #ffffff url("img_tree.png") no-repeat right top;  
}
```

- When using the shorthand property the order of the property values is:

- background-color
- background-image
- background-repeat
- background-attachment
- background-position

# CSS Backgrounds Example

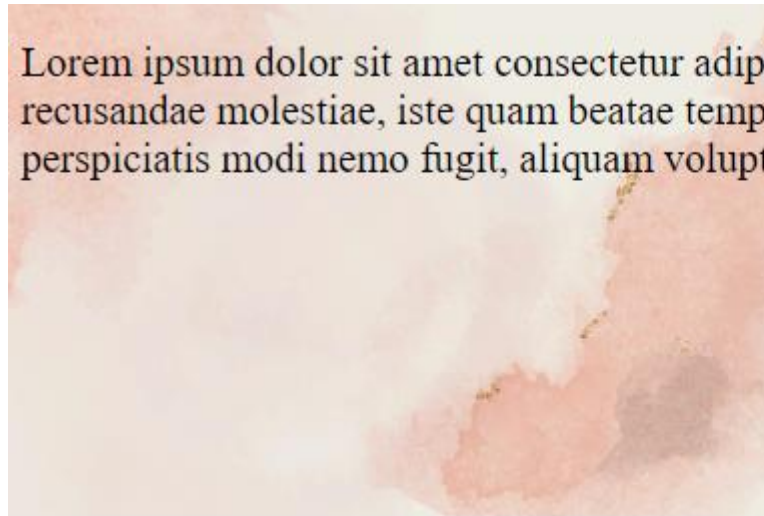
## HTML

```
<p>Lorem ipsum dolor sit amet consectetur adipisicing elit. Adipisci velit, excepturi eligendi recusandae molestiae, iste quam beatae tempore suscipit libero dolorum vero aliquid quod perspiciatis modi nemo fugit, aliquam voluptates?</p>
```

## CSS

```
*{  
  background-image: url(images/back.jpg);  
  background-repeat: no-repeat;  
  background-position: left top;  
  background-attachment: fixed;  
  background-size: 300px 200px;  
}
```

## RESULT



Lorem ipsum dolor sit amet consectetur adipisicing elit. Adipisci velit, excepturi eligendi recusandae molestiae, iste quam beatae tempore suscipit libero dolorum vero aliquid quod perspiciatis modi nemo fugit, aliquam voluptates?



# CSS Text

Name	Description	Example
<b>color</b>	<p>Set the text color. The color is specified by:</p> <ul style="list-style-type: none"><li>● a color name - like "red"</li><li>● a HEX value - like "#ff0000"</li><li>● an RGB value - like "rgb(255,0,0)"</li></ul>	<pre>body { color: blue;}  h1 { color: green;}</pre>
<b>text-align</b>	<ul style="list-style-type: none"><li>● is used to set the horizontal alignment of a text.</li><li>● A text can be left(start) or right(end) aligned, centered, or justified.</li></ul>	<pre>h1 { text-align: center;}  h2 { text-align: left;}  h3 { text-align: right;}</pre>

# CSS Text

Name	Description	Example
<b>text-decoration</b>	<ul style="list-style-type: none"><li>property is used to set or remove decorations from text</li><li>The value <code>text-decoration: none;</code> is often used to remove underlines from links:</li></ul>	<pre>h2 { text-decoration: underline;} h3 { text-decoration: line-through;} h4 { text-decoration: underline;}</pre>
<b>text-transform</b>	<ul style="list-style-type: none"><li>is used to specify uppercase and lowercase letters in a text</li></ul>	<pre>p.uppercase { text-transform: uppercase;} p.lowercase { text-transform: lowercase;} p.capitalize { text-transform: capitalize;}</pre>
<b>text-shadow</b>	<ul style="list-style-type: none"><li>adds shadow to text.</li><li>In its simplest use, you only specify the horizontal shadow (2px) and the vertical shadow (2px)</li></ul> <p><code>text-shadow: horizontal vertical blur color;</code></p>	<pre>h1 {   text-shadow: 2px 2px 5px red; }</pre>

# CSS Text Example

## HTML

```
<h3 class="r">Text Right alignment</h3>  
<h3 id="c">Text Center alignment</h3>  
<h3 class="l">Text Left alignment</h3>
```

## RESULT

~~Text Left alignment~~

Text Center alignment

Text Right alignment

## CSS

```
.r{  
  text-align: right;  
  text-decoration: overline;  
  color: crimson;  
  text-shadow: 3px 3px 2px rgb(15, 15, 15);  
}  
  
#c{  
  text-align: center;  
  text-decoration: underline;  
  color: darkgoldenrod;  
  text-shadow: 7px 9px 5px red;  
}  
  
.l{  
  text-align: left;  
  text-decoration: line-through;  
  color: darkorchid;  
  text-shadow: 7px -9px 5px rgb(8, 209, 85);  
}
```

# CSS Font

- Choosing the right font has a huge impact on how the readers experience a website.
- The right font can create a strong identity for your brand.
- Using a font that is easy to read is important. The font adds value to your text. It is also important to choose the correct color and text size for the font.

## Some Font Examples



In CSS, we use the `font-family` property to specify the font of a text.

```
.p1 {  
  font-family: "Times New Roman", Times, serif;  
}
```

Generic Font Family	Examples of Font Names
Serif	Times New Roman Georgia Garamond
Sans-serif	Arial Verdana Helvetica
Monospace	Courier New Lucida Console Monaco
Cursive	<i>Brush Script MT</i> <i>Lucida Handwriting</i>
Fantasy	<b>Copperplate</b> Papyrus

# CSS Font Style

Name	Description	Example
<b>font-style</b>	<p>This property has three values:</p> <ul style="list-style-type: none"><li>● normal - The text is shown normally</li><li>● italic - The text is shown in italics</li><li>● oblique - The text is "leaning" (oblique is very similar to italic, but less supported)</li></ul>	<pre>p.normal { font-style: normal;}  p.italic { font-style: italic;}  p.oblique { font-style: oblique;}</pre>
<b>font-weight</b>	<ul style="list-style-type: none"><li>● specifies the weight of a font to be normal, bold</li></ul>	<pre>p.normal { font-weight: normal;} p.thick { font-weight: bold;}</pre>

# CSS Font Style

Name	Description	Example
<b>font-variant</b>	<ul style="list-style-type: none"><li>● specifies whether or not a text should be displayed in a small-caps font.</li><li>● In a small-caps font, all lowercase letters are converted to uppercase letters. However, the converted uppercase letters appears in a smaller font size than the original uppercase letters in the text.</li></ul>	<pre>p.normal { font-variant: normal; }  p.small { font-variant: small-caps; }</pre>

# CSS Font Style

Name	Description	Example
<b>font-size</b>	<ul style="list-style-type: none"><li>● Sets the size of the text.</li><li>● Set Font Size With Pixels</li><li>● Set Font Size With Em</li><li>● The size can be calculated from pixels to em using this formula: <math>pixels/16=em</math></li><li>● Responsive Font Size</li><li>● The text size can be set with a <b>vw</b> unit, which means the "viewport width".</li></ul>	<pre>h1 {   font-size: 40px; }  h1 {   font-size: 2.5em; /* 40px/16=2.5em */ }  h1 {   font-size:10vw }</pre>

# CSS Font Style Example

## HTML

```
<p class="font">This is Example of font</p>
```

## RESULT

***THIS IS EXAMPLE OF FONT***

## CSS

```
.font{  
  color: black;  
  font-size: 2em;  
  font-family: sans-serif;  
  font-weight: bold;  
  font-variant: small-caps;  
  font-style: italic;  
}
```