

Text and fonts

CSS Font Properties

► **Font properties** of an element:

- **font-family** : change the face of a font.
- **font-style** : A font italic or oblique.
- **font-variant** : create a small-caps effect.
- **font-weight** : To increase or decrease bold or light a font a
- **font-size** : To increase or decrease the size of a font.

font-style

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- ▶ `<p style="font-style: italic;">`

This text will be rendered in italic style. `</p>`

- ▶ Output:

This text will be rendered in italic style.

- ▶ Possible Values:

normal, italic, oblique (more slanted than normal)

font-size

4

- ▶ `<p style="font-size: 20pt;">`

This font size is 20 pixels.

`</p>`

- ▶ Output:

This font size is 20 points.

- ▶ Possible values:

px, small, xx-small, x-small, medium, large, x-large, xx-large or in %

font-weight

5

- ▶ `<p style="font-weight: bold;">`

This font is bold.

`</p>`

- ▶ Output:

This font is bold.

- ▶ Possible values:

normal, bold, bolder, lighter, 100, 200, 300, 400, 500, 600, 700, 800, 900

font-variant

6

- ▶ `<p style="font-variant: small-caps;">`

This text will be rendered in small caps. `</p>`

- ▶ Output:

THIS TEXT WILL BE RENEDED AS SMALL CAPS.

- ▶ Possible values:
normal, small-caps

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line-height

- ▶ The **line-height property** is used to set the **vertical distance** between the baselines of adjacent lines of text.
- ▶ Used with **block-level elements**.

```
div{  
  border: 1px solid green;  
  width: 300px;  
  height:200px;  
  margin: auto;  
  text-align: center;  
}  
h1{  
  line-height: 120px;  
}
```

font-family

- ▶ `<p style="font-family: georgia, garamond, serif;">`

This text is rendered in either georgia, garamond, or the default serif font depending on which font you have at your system.

`</p>`

- ▶ Output:

This text is rendered in either georgia, garamond, or the default serif font depending on which font you have at your system.

Generic Font Family

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- These are the **generic name** values for the **font-family** property, followed by an example of each that the **browser might select** from the user's system fonts:

Generic font-family Names	Example
serif	Times New Roman
sans-serif	Arial
cursive	Zapf-Chancery
fantasy	Western
monospace	Courier

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@font-face

- ▶ Can specify online fonts to display text
- ▶ Can Download Fonts from <https://fonts.google.com/>
- ▶ Eliminates the need to depend on the limited number of fonts users have installed on their computers.

```
@font-face {  
  font-family: "Bitstream Vera Serif Bold";  
  src: url("https://mdn.mozillademos.org/files/2468/VeraSeBd.ttf");  
}
```

```
body { font-family: "Bitstream Vera Serif Bold", serif }
```

@font-face

```
@font-face {  
    font-family: MyHelvetica;  
    src: local("Helvetica Neue Bold"), local("HelveticaNeue-Bold"),  
    url(MgOpenModernaBold.ttf);  
    font-weight: bold;  
}
```

CSS Text Formatting

► You can set following **text properties** of an element:

- **color** : to set the color of a text.
- **letter-spacing** : to add or subtract space between the letters.
- **word-spacing** : to add or subtract space between the words.
- **text-indent**: to indent the text of a paragraph.
- **text-align** : to align the text of a document.
- **text-decoration** :to underline, overline and strikethrough text.
- **text-transform** : to capitalize text or convert text to uppercase or lowercase letters.
- **text-shadow** :to set the text shadow around a text.
- **white-space**: to control the flow and formatting of text.

letter-spacing

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- ▶ `<p style="letter-spacing: 5px;" >`

This text is having space between letters.

`</p>`

- ▶ Output:

This text is having space between letters.

- ▶ Possible values:
normal or a number.

word-spacing

14

▶ `<p style="word-spacing: 5px;" >`

This text is having space between words.

`</p>`

▶ Output:

This text is having space between words.

▶ Possible values:

normal or a number.

text-indent

15

- ▶ The `text-indent` property is used to **indent only the first line** of text within an element.
- ▶ The **default value** for this property is `0`.
- ▶ It only applies to **block-level elements**.
- ▶ `<p style="text-indent: 1cm;" >`
This text will have first line indent by 1cm.
and this line will remain at its actual position.
`</p>`

text-decoration

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- ▶ `<p style="text-decoration: underline;" >`

This will be underline.

`</p>`

- ▶ Output:

This will be underline.

- ▶ Possible values:

none, underline, overline, line-through, blink

Text-align

- ▶ To center a element with a known width
 - ▶ `margin: 0 auto;`
- ▶ To center the content of an element (text, images etc.)
 - ▶ `text-align: center.`
- ▶ Can center block elements with `text-align: center`
 - ▶ by settings it's display to inline or inline-block on the container
 - ▶ But its not recommended .

text-transform

18

- ▶ `<p style="text-transform: uppercase;" >`

This will be in uppercase.

`</p>`

- ▶ Output:

THIS WILL BE IN UPPERCASE.

- ▶ Possible values:

none, capitalize, uppercase, lowercase

white-space

19

- ▶ Used to specify whether the **blank space between words** both **horizontally and vertically** is collapsed to a **single character** space or is retained and preserved as is.
- ▶ Used with **block-level elements**.
- ▶ `<p style="white-space: pre;" >`
This text has a line break
and the white-space pre setting tells the browser.
`</p>`
- ▶ **Output:**
This text has a line break
and the white-space pre setting tells the browser.
- ▶ **Possible values:**
normal, pre,

CSS3 Text Effects

- ▶ Text Effect is used to extend the text features
- ▶ Their are mainly two properties of CSS3 Text Effects,
- ▶ **text-shadow**
 - ▶ to create the shadow around the text,
 - ▶ can change the shadow color .
- ▶ **word-wrap**
 - ▶ to break the continued text in another line.

text-shadow

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```
#word_wrap
```

```
{  
  word-wrap:break-word;  
  width:150px;  
  border:1px solid #ff0000;  
}
```

► `<p style="text-shadow: 4px 4px 8px blue;" >`

If your browser supports the css text-shadow property, this text will have a blue shadow.

`</p>`

If your browser supports the css text-shadow property, this text will have a blue shadow.

Background Properties

- ▶ The background properties set the background effects for an element
- ▶ **background-color**
 - ▶ Place a color behind an element's contents
- ▶ **background-image**
 - ▶ Place an image behind the contents of an element.
 - ▶ GIF, PNG, or JPEG image
 - ▶ `url(imagename.gif)`
- ▶ **background-size:**
 - ▶ specifies the size of the background images.
 - ▶ Can be fully constrained or only partially
 - ▶ **background-size:** cover,contain;
 - ▶ **background-size:** 50% 25%(Height and Width)
- ▶

Background Properties

- ▶ **background-repeat**

- ▶ Repeat an image horizontally or vertically (or both) to fill the contents of an element.
- ▶ Repeat-x,repeat-y,no-repeat,repeat

- ▶ **Background**

- ▶ shorthand property to change all of the background properties. Values
- ▶ **image value**, **color value**, **position value**, **repeat value**, and attachment value.

```
body{  
    background:url('flower.jpg') yellow top left repeat-y fixed;  
}
```


Background Properties

- ▶ **background-attachment**
 - ▶ Have a background image scroll with the cursor.
- ▶ **Fixed**
 - ▶ Background **is fixed with regard to the viewport**.
 - ▶ Even if an element has a scrolling mechanism, a 'fixed' background doesn't move with the element.
- ▶ **Scroll**
 - ▶ The background scrolls along with the element.
 - ▶ Default Value
- **Local**
 - ▶ The background scrolls along with the element's contents

```
p {
  background-image: url("starsolid.gif");
  background-attachment: fixed;
}
```


Background Properties

- ▶ **background-position**

- ▶ Position an image within an element.
- ▶ sets the initial position for each defined background image
- ▶ top,bottom,left,right,center;

background-position: 0 0;

background-position: 0 0, center;

Background Properties

- ▶ The **background-origin**
 - ▶ Determines the background positioning area,
 - ▶ Position of the origin of an image specified border-box;
 - ▶ border-box, padding-box, content-box;
- ▶ **border-box**
 - ▶ Extends to the outside edge of the border
- ▶ **padding-box**
 - ▶ extends to the outside edge of the padding.
 - ▶ No background is drawn below the border
- ▶ **content-box**
 - ▶ painted within the content box.

Multiple Background

- ▶ With CSS3 can apply **multiple backgrounds** to elements.
- ▶ Backgrounds are layered atop one another
- ▶ first background on top
- ▶ last background listed in the back
 - ▶ Only the last background can include a background color.
- ▶ Can be done with both the shorthand background property and the individual properties
- ▶ Following properties can be specified one per background:
 - ▶ background-attachment,
 - ▶ background-image,
 - ▶ background-origin,
 - ▶ background-position,
 - ▶ background-repeat,
 - ▶ background-size.
- ▶

Multiple backgrounds

- ▶ background: **url(image1.png), url(image2.png), url(image3.png)** RED
- ▶ background: url(image1.png) right bottom, **url(image2.png)**
center, url(image3.png)
- ▶ **The second background image, centered horizontally and vertically.**
- ▶ **The third background image – by default alligned top left.**

Cascade

- ▶ The cascade sorts out all conflicts when multiple declarations would affect a given element.
- ▶ Important declarations will override less important ones.
- ▶ Among declarations with equal importance, the rule's specificity controls which one will apply.
- ▶ And, all else being equal, the source order makes the final distinction.

Cascading

- ▶ It's the mechanism that controls the end result when multiple, conflicting CSS declarations apply to the same element.
- ▶ Its controlled by the order in which CSS declarations are applied:
 - ▶ Importance
 - ▶ Specificity
 - ▶ Source order

Specificity

- ▶ It can be thought of as a measure of how specific a rule's selector is.
- ▶ A selector with low specificity may match many elements (like * which matches every element in the document),
- ▶ while a selector with high specificity might only match a single element on a page (like #nav that only matches the element with an id of nav).
- ▶ If two or more declarations conflict for a given element, and all the declarations have the same importance, then the one in the rule with the most specific selector will “win”.

Source order

- ▶ If two declarations affect the same element, have the same importance and the same specificity, the final distinguishing mark is the source order.
- ▶ The declaration that appears later in the style sheets will “win” over those that come before it.

Inheritance

- ▶ Process by which properties are passed from parent to child elements
 - ▶ even though those properties have not been explicitly defined by other means.
- ▶ Certain properties are inherited automatically
 - ▶ styles that apply to text are inherited,
 - ▶ borders, margins and paddings and similar styles are not.
- ▶ Inheritance and the Cascade
 - ▶ inheritance applies to the DOM tree
 - ▶ cascade deals with the style sheet rules.

Inheritance

```
<style>
  p {
    color: red;
    border:2px solid blue;
  }
  strong{
    border:inherit ;
  }
</style>
```

- ▶ <p>
- ▶ This is the First Paragraph
- ▶ The second line of this paragraph is also created with the styles.
- ▶ </p>

!important

- ▶ Important declarations help override normal specificity when making changes to their stylesheets.
- ▶ It provides a way for a stylesheet author to give a CSS value **more weight** than it naturally has.
- ▶ Its a reference to an entire CSS declaration, including property and value
- ▶ `#example { font-size: 14px !important; }`
- ▶ `#container #example { font-size: 10px; }`

!important

- ▶ !important keyword must be placed at the end of the line,
- ▶ Prefix ! Doesn't means *not*.
- ▶ 'this is important, ignore subsequent rules, and any usual specificity issues, apply *this* rule!'
- ▶ Defining a rule with the !important discards the normal concerns as regards the 'later' rule overriding the 'earlier' ones.
- ▶ Should be Used with Caution in the most appropriate Cases

Minify CSS

- ▶ Ccss can be Minified by Using Tools
- ▶ Minify generates a new file with an altered file extension such as .min.css, .min.html, .min.js, .min.json or .min.svg.
- ▶ Minify is very light plugin
- ▶ Minify does not need Internet access to do its job, it works offline.
- ▶ Package is added by Using Install Package Control