

# CSS INTRODUCTION



# CSS Introduction

CSS is the language we use to style a Web page.

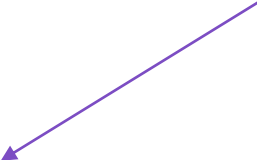
## What is CSS?

- 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
- External stylesheets are stored in CSS files

# Why CSS ?

## WITHOUT CSS

```
<table border="1" cellspacing="0" cellpadding="0" width="200" align="center" bgcolor="red">
<tr>
  <td bgcolor="yellow" align="left">1</td>
  <td align="left"> 2 </td>
  <td align="left"> 3 </td>
</tr>
<tr>
  <td bgcolor="yellow" align="left">1</td>
  <td align="left"> 2 </td>
  <td align="left"> 3 </td>
</tr>
<tr>
  <td bgcolor="yellow" align="left">1</td>
  <td align="left"> 2 </td>
  <td align="left"> 3 </td>
</tr>
</table>
```



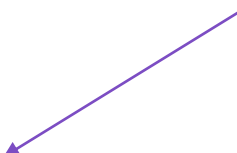
1	2	3
1	2	3
1	2	3

```
<table>
  <tr>
    <td>1</td>
    <td>2</td>
    <td>3</td>
  </tr>
```

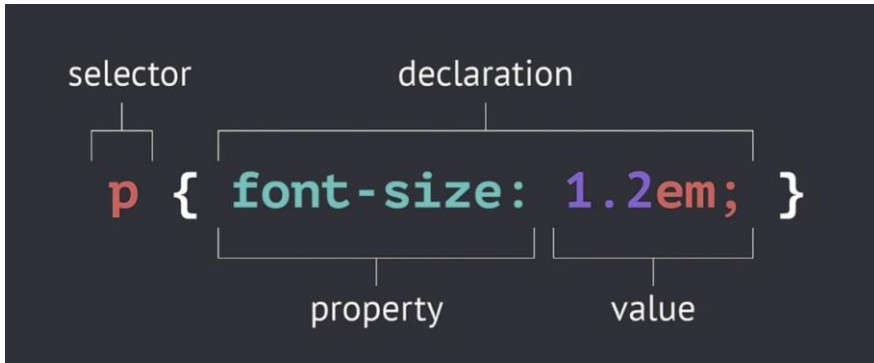
## WITH CSS

```
table {
  border: 1px;
  width: 200px;
  height: 100px;
  align: center;
  background-color: red;
}

td {
  background-color: yellow;
  align: center;
}
```



# CSS Selectors



The CSS element Selector

```
p {  
  text-align: center;  
  color: red;  
}
```

The CSS ID Selector

```
#para1 {  
  text-align: center;  
  color: red;  
}
```

The CSS class Selector

```
.center {  
  text-align: center;  
  color: red;  
}
```

The CSS Universal Selector

```
* {  
  text-align: center;  
  color: blue;  
}
```

Combined Selector

```
p.center {  
  text-align: center;  
  color: red;  
}
```

```
<p class="blueText">This is a paragraph.</p>  
<h1 class="blueText">Header</h1>  
<h6 class="blueText">Small Header.</h6>
```

```
<p id="firstElement">This is a paragraph.</p>
```

# CSS Defining

## In HTML File (**Internal**)

```
<!DOCTYPE html>
<html>
  <head>
    <style>
      body {
        background-color: blue;
      }
    </style>
  </head>
  <body>
    <h1>My First CSS Example</h1>
    <p>This is a paragraph.</p>
  </body>
</html>
```

## In separate file (**External**)

"styles.css":

```
body {
  background-color: powderblue;
}
h1 {
  color: blue;
}
p {
  color: red;
}
```

```
<link rel="stylesheet" href="styles.css">
```

# CSS Selectors

Selector	Example	Example description
<u>.class</u>	.intro	Selects all elements with class="intro"
.class1.class2	.name1.name2	Selects all elements with both <i>name1</i> and <i>name2</i> set within its class attribute
.class1 .class2	.name1 .name2	Selects all elements with <i>name2</i> that is a descendant of an element with <i>name1</i>
<u>#id</u>	#firstname	Selects the element with id="firstname"
*	*	Selects all elements
<u>element</u>	p	Selects all <p> elements
<u>element.class</u>	p.intro	Selects all <p> elements with class="intro"
<u>element,element</u>	div, p	Selects all <div> elements and all <p> elements
<u>element element</u>	div p	Selects all <p> elements inside <div> elements
<u>element&gt;element</u>	div > p	Selects all <p> elements where the parent is a <div> element
<u>element+element</u>	div + p	Selects the first <p> element that is placed immediately after <div> elements
<u>element1~element2</u>	p ~ ul	Selects every <ul> element that is preceded by a <p> element
[ <u>attribute</u> ]	[target]	Selects all elements with a target attribute
[ <u>attribute=value</u> ]	[target=_blank]	Selects all elements with target="_blank"
[ <u>attribute~=value</u> ]	[title~=flower]	Selects all elements with a title attribute containing the word "flower"
[ <u>attribute =value</u> ]	[lang =en]	Selects all elements with a lang attribute value equal to "en" or starting with "en-"
[ <u>attribute^=value</u> ]	a[href^="https"]	Selects every <a> element whose href attribute value begins with "https"
[ <u>attribute\$=value</u> ]	a[href\$=".pdf"]	Selects every <a> element whose href attribute value ends with ".pdf"

# CSS Selectors

<u>:active</u>	a:active	Selects the active link
<u>::after</u>	p::after	Insert something after the content of each <p> element
<u>::before</u>	p::before	Insert something before the content of each <p> element
<u>:checked</u>	input:checked	Selects every checked <input> element
<u>:default</u>	input:default	Selects the default <input> element
<u>:disabled</u>	input:disabled	Selects every disabled <input> element
<u>:empty</u>	p:empty	Selects every <p> element that has no children (including text nodes)
<u>:enabled</u>	input:enabled	Selects every enabled <input> element
<u>:first-child</u>	p:first-child	Selects every <p> element that is the first child of its parent
<u>::first-letter</u>	p::first-letter	Selects the first letter of every <p> element
<u>:hover</u>	a:hover	Selects links on mouse over
<u>:nth-child(<i>n</i>)</u>	p:nth-child(2)	Selects every <p> element that is the second child of its parent
<u>:nth-last-child(<i>n</i>)</u>	p:nth-last-child(2)	Selects every <p> element that is the second child of its parent, counting from the last child
<u>:nth-last-of-type(<i>n</i>)</u>	p:nth-last-of-type(2)	Selects every <p> element that is the second <p> element of its parent, counting from the last child
<u>:nth-of-type(<i>n</i>)</u>	p:nth-of-type(2)	Selects every <p> element that is the second <p> element of its parent
<u>:only-of-type</u>	p:only-of-type	Selects every <p> element that is the only <p> element of its parent

## CSS Colors(color, backgorund-color)

Name - **background-color**: grey;

HEX - **#rrggbb**

RGB - **rgb**(red, green, blue)

## CSS Font

```
font-family: Verdana,sans-serif;  
font-size: 15px;  
font-weight: 900;  
font-style: normal;
```

## CSS Background

- background-color
- background-image
- background-repeat
- background-attachment
- background-position
- background (shorthand property)

## Opacity / Transparency

```
div {  
    background-color: green;  
    opacity: 0.3;  
}
```



# CSS Borders

## border-style:

A dotted border.

A dashed border.

A solid border.

A double border.

A groove border. The effect depends on the border-color value.

A ridge border. The effect depends on the border-color value.

An inset border. The effect depends on the border-color value.

An outset border. The effect depends on the border-color value.

No border.

A hidden border.

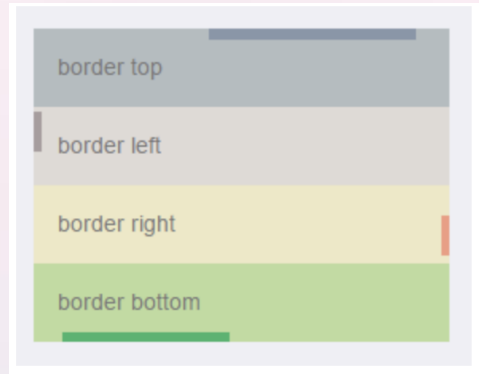
A mixed border.

## border-width:

5px border-width

medium border-width

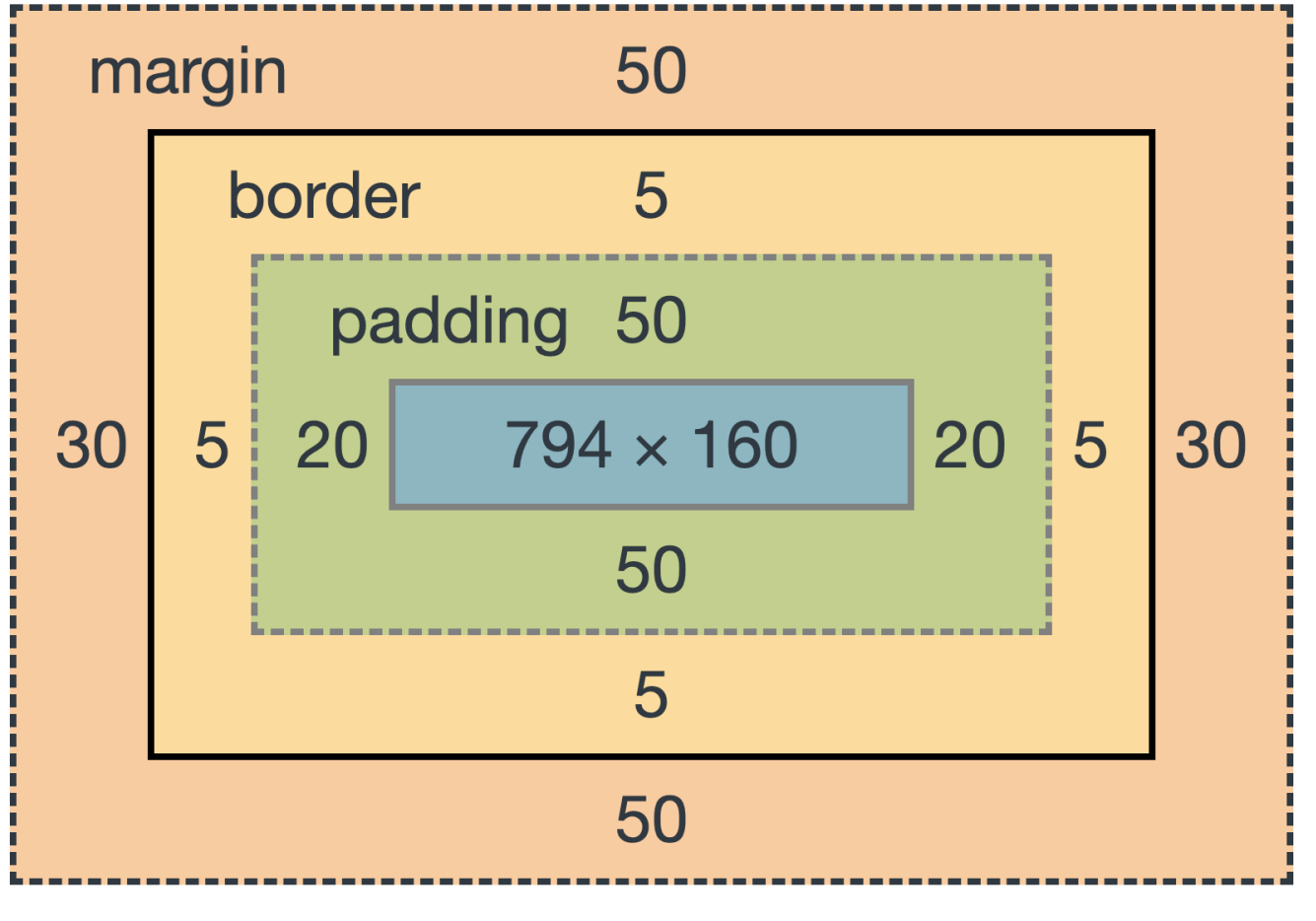
## CSS Border Sides



## CSS Border - Shorthand Property

```
p {  
  border: 5px solid red;  
}
```

# CSS Box



# CSS Height/Width

The `height` and `width` properties may have the following values:

- `auto` - This is default. The browser calculates the height and width
- `length` - Defines the height/width in px, cm etc.
- `%` - Defines the height/width in percent of the containing block
- `initial` - Sets the height/width to its default value
- `inherit` - The height/width will be inherited from its parent value

Also available `max-height`, `max-width`, `min-height`, `min-width`

# CSS Text Alignment

text-align

**Heading 1 (center)**

**Heading 2 (left)**

**Heading 3 (right)**

text-align-last

**text-align-last: right:**

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Etiam semper diam at erat pulvinar, at pulvinar felis blandit. Vestibulum volutpat tellus diam, consequat gravida libero rhoncus ut.

**text-align-last: center:**

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Etiam semper diam at erat pulvinar, at pulvinar felis blandit. Vestibulum volutpat tellus diam, consequat gravida libero rhoncus ut.

**text-align-last: justify:**

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Etiam semper diam at erat pulvinar, at pulvinar felis blandit. Vestibulum volutpat tellus diam, consequat gravida libero rhoncus ut.

direction


This is the default text direction.

unicode-bidi


.noitcerid txet tfel-ot-thgir si sihT

vertical-align

**vertical-align: baseline (default):**

An  image with a default alignment.


**vertical-align: text-top:**

An  image with a text-top alignment.


**vertical-align: text-bottom:**

An  image with a text-bottom alignment.

**vertical-align: sub:**

An  image with a sub alignment.

**vertical-align: sup:**

An  image with a super alignment.

# CSS Text Decoration

text-decoration:

**Overline text decoration**

~~Line-through text decoration~~

Underline text decoration

Overline and underline text decoration.

text-decoration-style

solid  
double  
dotted  
dashed  
dot dash  
dot dot dash  
wave

text-decoration-color

**Overline text decoration**

text-decoration-thickness: 5px; **Heading 2**

\*\*\*\*\*

```
text-decoration: underline red double 5px;
```

# CSS Text Transformation | Spacing

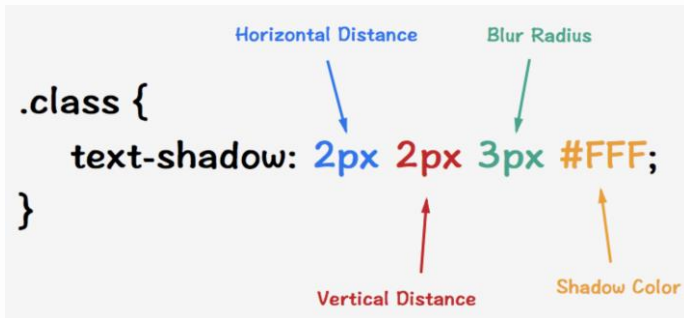
**text-transform:** uppercase | lowercase | capitalize;

**text-indent:** size; // *Indentation of the first line of a text*

**letter-spacing:** size; // *Space between characters*

**line-height:** size; // *Space between lines*

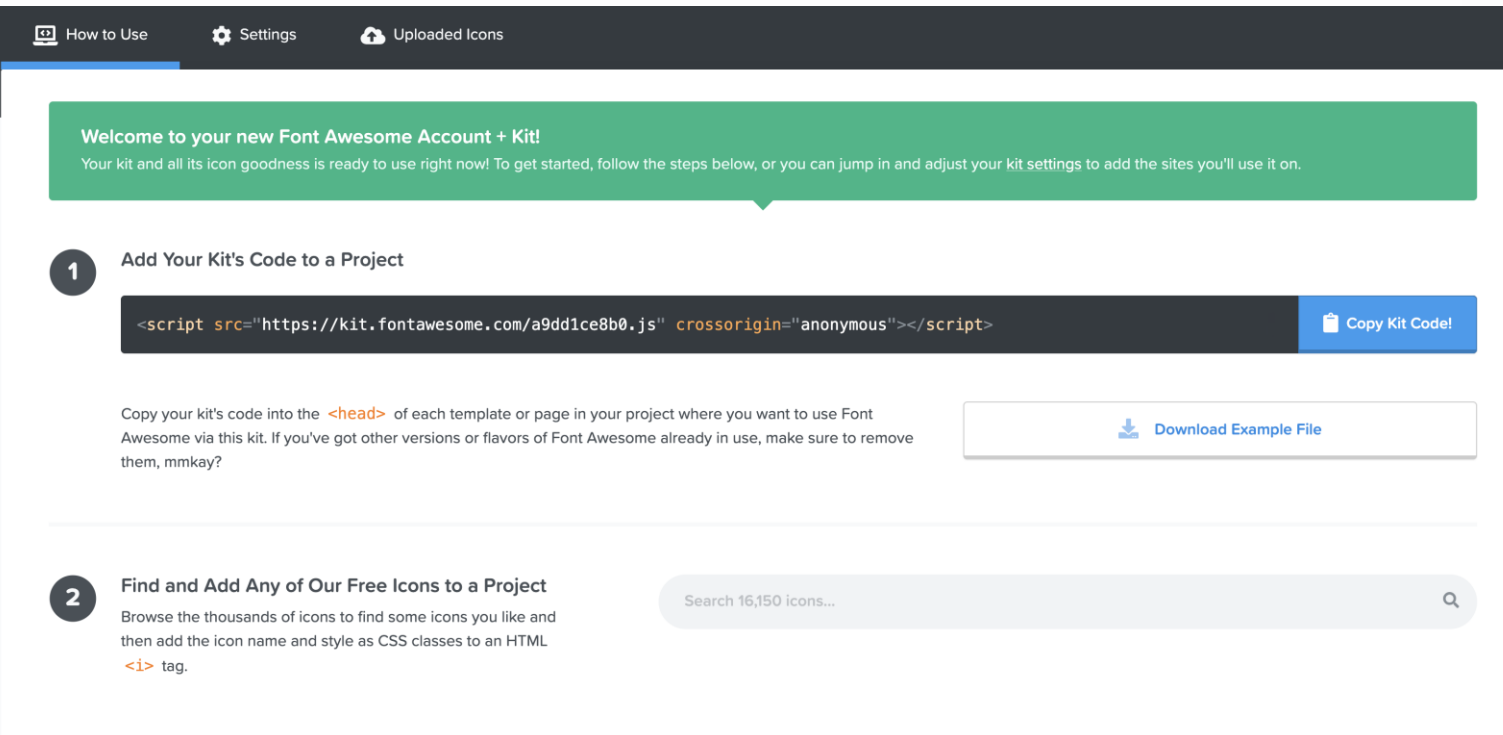
**word-spacing:** size; // *Space between words*



# CSS Icons

Icons can easily be added to your HTML page, by using an icon library.

<https://fontawesome.com>



The screenshot shows the Font Awesome website's 'How to Use' page. At the top, there's a dark navigation bar with links for 'How to Use', 'Settings', and 'Uploaded Icons'. Below this is a green welcome banner. The main content area is divided into two steps. Step 1, 'Add Your Kit's Code to a Project', shows a code snippet for the kit's script and a 'Copy Kit Code' button. Step 2, 'Find and Add Any of Our Free Icons to a Project', includes a search bar with the text 'Search 16,150 icons...' and a magnifying glass icon.

How to Use Settings Uploaded Icons

Welcome to your new Font Awesome Account + Kit!  
Your kit and all its icon goodness is ready to use right now! To get started, follow the steps below, or you can jump in and adjust your kit settings to add the sites you'll use it on.

1 Add Your Kit's Code to a Project

```
<script src="https://kit.fontawesome.com/a9dd1ce8b0.js" crossorigin="anonymous"></script>
```

Copy Kit Code

Copy your kit's code into the `<head>` of each template or page in your project where you want to use Font Awesome via this kit. If you've got other versions or flavors of Font Awesome already in use, make sure to remove them, mmkay?

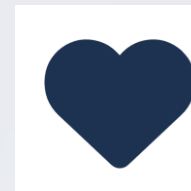
Download Example File

2 Find and Add Any of Our Free Icons to a Project

Browse the thousands of icons to find some icons you like and then add the icon name and style as CSS classes to an HTML `<i>` tag.

Search 16,150 icons...

```
<i class="fa-solid fa-heart"></i>
```



# CSS Display

**display:** inline | block | none;

**visibility:hidden;** also hides an element.

However, the element will still take up the same space as before. The element will be hidden, but still affect the layout:



# CSS Position, Float

## The position Property

The `position` property specifies the type of positioning method used for an element.

There are five different position values:

- `static`
- `relative`
- `fixed`
- `absolute`
- `sticky`

Elements are then positioned using the `top`, `bottom`, `left`, and `right` properties. However, these properties will not work unless the `position` property is set first. They also work differently depending on the position value.

The `z-index` property specifies the stack order of an element.



# CSS Box Shadow

```
#example1 {  
  box-shadow: 10px 10px 8px #888888;  
}
```

Text