

# CSS3

Backgrounds – Border Images – Colors  
– Shadows – Text – Transformations –  
Transitions

# CSS background-color Property

- ▶ The background-color property sets the background color of an element.
- ▶ The background of an element is the total size of the element, including padding and border (but not the margin).

background-color: *color*|transparent|initial|inherit;

Value	Description
<i>color</i>	Specifies the background color.
transparent	Specifies that the background color should be transparent. This is default
initial	Sets this property to its default value.
inherit	Inherits this property from its parent element.

- ▶ Specify the background color with a HEX value:  
body {background-color: #92a8d1;}
- ▶ Specify the background color with an RGB value:  
body {background-color: rgb(201, 76, 76);}
- ▶ Set background colors for different elements:

```
body {  
  background-color: #fefbd8;  
}
```

```
h1 {  
  background-color: #80ced6;  
}
```

```
div {  
  background-color: #d5f4e6;  
}
```

```
span {  
  background-color: #f18973;  
}
```

```
<!DOCTYPE html>
<html>
<head>
<style>
body {
  background-color: #fefbd8;
}

h1 {
  background-color: #80ced6;
}

div {
  background-color: #d5f4e6;
}

span {
  background-color: #f18973;
}
</style>
</head>
```

```
<body>
```

```
<h1>Background Color</h1>
```

```
<div>Set a background color for
a div element.</div>
```

```
<p>Set a <span>background
color</span> for only a part of
a text.</p>
```

```
</body>
```

```
</html>
```



# CSS background-image Property

- ▶ The background-image property sets one or more background images for an element.
- ▶ By default, a background-image is placed at the top-left corner of an element, and repeated both vertically and horizontally.

# CSS background-image Property

- ▶ Set a background-image for the <body> element

```
body {
```

```
    background-image: url("paper.gif"); }
```

- ▶ Set two background images for the <body> element

```
body {
```

```
    background-image: url("img_tree.gif"),  
    url("paper.gif");
```

```
}
```



# CSS background-image Property

- ▶ `<p style="background-image: url('img_girl.jpg');">`
- ▶ `<style>`  
`p {`  
`background-image: url('img_girl.jpg');`  
`}`  
`</style>`
- ▶ `<style>`  
`body {`  
`background-image: url('img_girl.jpg');`  
`}`  
`</style>`
- ▶ `<style>`  
`body {`  
`background-image: url('example_img_girl.jpg');`  
`background-repeat: no-repeat;`  
`}`  
`</style>`

# CSS background-image Property

- ▶ If you want the background image to cover the entire element, you can set the background-size property to cover.
- ▶ Also, to make sure the entire element is always covered, set the background-attachment property to fixed:
- ▶ This way, the background image will cover the entire element, with no stretching (the image will keep its original proportions):
- ▶ 

```
<style>
body {
  background-image: url('img_girl.jpg');
  background-repeat: no-repeat;
  background-attachment: fixed;
  background-size: cover;
}
</style>
```



# CSS background-image Property

- ▶ If you want the background image to stretch to fit the entire element, you can set the background-size property to 100% 100%:

```
<style>
body {
  background-image: url('img_girl.jpg');
  background-repeat: no-repeat;
  background-attachment: fixed;
  background-size: 100% 100%;
}
</style>
```

```
<!DOCTYPE html>
<html>
<head>
<style>
body {
  background-image: url('flower.jpg');
  background-repeat: no-repeat;
background-attachment: fixed;
  background-size: cover;
  background-size: 200% 200%;
}
</style>
</head>
<body>

<h2>Background Image</h2>

<p>You can specify background images<br>
</p>

</body>
</html>
```

# CSS border Property

- ▶ Set the style of the borders for different elements
- ▶ The border property is a shorthand property for:
  - border-width
  - border-style (required)
  - border-color
- ▶ If border-color is omitted, the color applied will be the color of the text.

# CSS border Property

- ▶ border: *border-width border-style border-color*|initial|inherit;

Value	Description
<i><u>border-width</u></i>	Specifies the width of the border. Default value is "medium"
<i><u>border-style</u></i>	Specifies the style of the border. Default value is "none"
<i><u>border-color</u></i>	Specifies the color of the border. Default value is the color of the text

```
<!DOCTYPE html>
<html>
<head>
<style>
h1 {
  border: 5px solid red;
}

h2 {
  border: 4px dotted blue;
}

div {
  border: double;
}
</style>
</head>
<body>

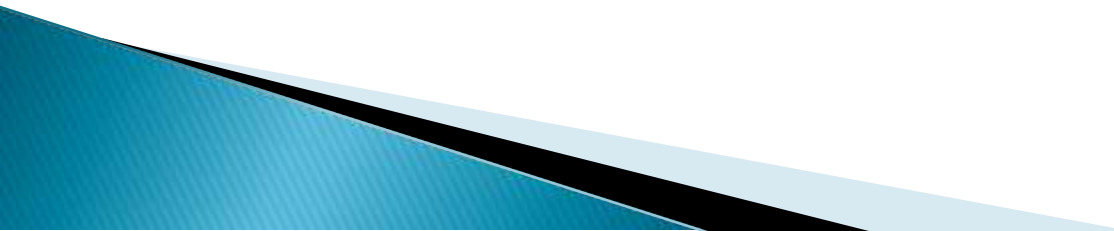
<h1>A heading with a solid red border</h1>

<h2>A heading with a dotted blue border</h2>

<div>A div element with a double border.</div>

</body>
</html>
```

# Different values of the border property.

- ▶ border: 5px solid red;
  - ▶ border: 4px dotted blue;
  - ▶ border: 4px dashed blue;
  - ▶ border: 4px inset;
  - ▶ border: 4px outset;
  - ▶ border: double;
- 

```
<!DOCTYPE html>
<html>
<head>
<style>
body {
  background-color:#E7E9EB;
}
#myDIV {
  width:100%;
  height:300px;
  background-color:#FFFFFF;
  border:4px dashed blue;
}
</style>
</head>
<body>

<h1>The border Property</h1>

<div id="myDIV">
A demonstration on how to add a border.
</div>

</body>
</html>
```

# CSS border-image Property

- ▶ The border-image property allows you to specify an image to be used as the border around an element.
- ▶ The border-image property is a shorthand property for:
  - border-image-source
  - border-image-slice
  - border-image-width
  - border-image-outset
  - border-image-repeat
- ▶ Omitted values are set to their default values.



# CSS border-image Property

**border-image:** *source slice width outset repeat*|initial|inherit;

Value	Description
<i>border-image-source</i>	The path to the image to be used as a border
<i>border-image-slice</i>	How to slice the border image
<i>border-image-width</i>	The width of the border image
<i>border-image-outset</i>	The amount by which the border image area extends beyond the border box
<i>border-image-repeat</i>	Whether the border image should be repeated, rounded or stretched
initial	Sets this property to its default value.
inherit	Inherits this property from its parent element.

# Different values of the border-image property

- ▶ `border-image: url(border.png) 50 round;`
- ▶ `border-image: url(border.png) 20% round;`
- ▶ `border-image: url(border.png) 30% round;`
- ▶ `border-image: url(border.png) 20% stretch;`
- ▶ `border-image: url(border.png) 30% stretch;`
- ▶ `border-image: url(border.png) 40% stretch;`

```
<!DOCTYPE html>
<html>
<head>
<style>
body {
  background-color: pink;
}
#myDIV {
  height: 600px;
  background-color: green;
  border: 15px solid transparent;
  padding: 20px;
  border-image: url(https://img.freepik.com/free-vector/colorful-border-gray-background_53876-118888.jpg?w=360) 50 round;
}
</style>
</head>
<body>

<h1>The border-image Property</h1>

<div id="myDIV">
<p>A demonstration on different ways to set the border image.</p>
<p>We used this image:<br>

</p>
</div>

</body>
</html>
```

# CSS border-color Property

- ▶ The border-color property sets the color of an element's four borders.
- ▶ This property can have from one to four values.
- ▶ **If the border-color property has four values:**
- ▶ border-color: red green blue pink;
  - top border is red
  - right border is green
  - bottom border is blue
  - left border is pink
- ▶ **If the border-color property has three values:**
- ▶ border-color: red green blue;
  - top border is red
  - right and left borders are green
  - bottom border is blue

# CSS border-color Property

- ▶ **If the border-color property has two values:**
- ▶ border-color: red green;
  - top and bottom borders are red
  - right and left borders are green
- ▶ **If the border-color property has one value:**
- ▶ border-color: red;
  - all four borders are red
- ▶ Always declare the border-style property before the border-color property. An element must have borders before you can change the color.

```
<!DOCTYPE html>
<html>
<head>
<style>
h1 {
  border-style: solid;
  border-color: #92a8d1;
}
```

```
div {
  border-style: solid;
  border-color: #92a8d1;
}
</style>
</head>
<body>
```

```
<h1>A heading with a colored border</h1>
```

```
<div>The border-color can be specified with a value.</div>
```

```
<p><strong>Note:</strong> The border-color property does not work if it is used alone. Use
the border-style property to set the border first.</p>
```

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

# CSS Shadow Property

- CSS3 supported to add shadow to text or elements.
- Shadow property has divided as follows –
  - Text shadow
  - Box Shadow

# Text shadow

- The CSS `text-shadow` property applies shadow to text.
- In its simplest use, you only specify the horizontal shadow (2px) and the vertical shadow (2px)

```
h1 {  
  text-shadow: 2px 2px red;  
}
```

- Then, add a blur effect to the shadow

```
h1 {  
  text-shadow: 2px 2px 5px red;  
}
```



# Text shadow

- Multiple Shadows
  - To add more than one shadow to the text, you can add a comma-separated list of shadows.

```
h1 {  
  text-shadow: 0 0 3px red, 0 0 5px green;  
}
```

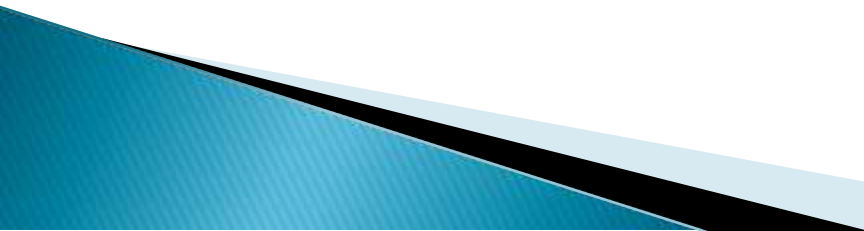


```
<!DOCTYPE html>
<html>
<head>
<style>
h1 {
  text-shadow: 0 0 3px #FF0000, 0 0 5px #0000FF;
}
</style>
</head>
<body>

<h1>Text-shadow with red and blue neon glow!</h1>

</body>
</html>
```

# Box Shadow

- In its simplest use, you only specify a horizontal and a vertical shadow. The default color of the shadow is the current text-color.
  - The spread parameter defines the spread radius. A positive value increases the size of the shadow, a negative value decreases the size of the shadow.
  - The inset parameter changes the shadow from an outer shadow (outset) to an inner shadow.
  - Multiple shadows can be added
- 

```
<!DOCTYPE html>
<html>
<head>
<style>
div {
  width: 300px;
  height: 100px;
  padding: 15px;
  background-color: coral;
  box-shadow: 10px 10px lightblue inset;
}
</style>
</head>
<body>

<h1>The box-shadow Property</h1>

<div>A div element with a lightblue box-shadow</div>

</body>
</html>
```

# CSS Text

- ▶ Text Color

```
body {  
    color: blue;  
}
```

```
h1 {  
    color: green;  
}
```

# CSS Text

## ▶ Text Alignment and Text Direction

- The `text-align` property is used to set the horizontal alignment of a text.
- A text can be left or right aligned, centered, or justified.

```
h1 {  
    text-align: center;  
}
```

# CSS Text

## ▶ Text Direction

- The `direction` and `unicode-bidi` properties can be used to change the text direction of an element:

```
p {  
  direction: rtl;  
  unicode-bidi: bidi-override;  
}
```

```
<!DOCTYPE html>
<html>
<head>
<style>
p.ex1 {
  direction: rtl;
  unicode-bidi: bidi-override;
}
</style>
</head>
<body>

<p>This is the default text direction.</p>

<p class="ex1">This is right-to-left text direction.</p>

</body>
</html>
```



# CSS Text Alignment/Direction Properties

Property	Description
<a href="#">direction</a>	Specifies the text direction/writing direction
<a href="#">text-align</a>	Specifies the horizontal alignment of text
<a href="#">text-align-last</a>	Specifies how to align the last line of a text
<a href="#">unicode-bidi</a>	Used together with the <a href="#">direction</a> property to set or return whether the text should be overridden to support multiple languages in the same document
<a href="#">vertical-align</a>	Sets the vertical alignment of an element

# Text Transformation

- ▶ The text-transform property is used to specify uppercase and lowercase letters in a text.
- ▶ It can be used to turn everything into uppercase or lowercase letters, or capitalize the first letter of each word

```
<!DOCTYPE html>
<html>
<head>
<style>
p.uppercase {
  text-transform: uppercase;
}
```

```
p.lowercase {
  text-transform: lowercase;
}
```

```
p.capitalize {
  text-transform: capitalize;
}
```

```
</style>
</head>
<body>
```

```
<h1>Using the text-transform property</h1>
```

```
<p class="uppercase">This text is transformed to uppercase.</p>
```

```
<p class="lowercase">This text is transformed to lowercase.</p>
```

```
<p class="capitalize">This text is capitalized.</p>
```

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

# CSS Text Spacing

## ▶ Text Indentation

- The `text-indent` property is used to specify the indentation of the first line of a text

```
p {  
    text-indent: 50px;  
}
```

## ▶ Letter Spacing

- The `letter-spacing` property is used to specify the space between the characters in a text.

```
h1 {  
    letter-spacing: 5px;  
}
```

```
h2 {  
    letter-spacing: -2px;  
}
```

# CSS Text Spacing

## ▶ Line Height

- The line-height property is used to specify the space between lines

## ▶ Word Spacing

- The word-spacing property is used to specify the space between the words in a text

```
p.one {  
  word-spacing: 10px;  
}
```

```
p.two {  
  word-spacing: -2px;  
}
```

```
p.small {  
  line-height: 0.8;  
}
```

```
p.big {  
  line-height: 1.8;  
}
```

# CSS Text Spacing

## ▶ White Space

- The white-space property specifies how white-space inside an element is handled.

```
p {  
    white-space: nowrap;  
}
```

Property	Description
letter-spacing	Specifies the space between characters in a text
line-height	Specifies the line height
text-indent	Specifies the indentation of the first line in a text-block
white-space	Specifies how to handle white-space inside an element
word-spacing	Specifies the space between words in a text