



# CSS

## CSS 3

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# Agenda



## 1 CSS 3

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## Objectives

At the end of this module, you will be able to

- Explore the new features introduced in CSS3
- Set shadows for box and text
- Use enhanced border properties
- Use enhanced background properties
- Explore transform and transition properties

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## CSS 3 Introduction

- As discussed earlier, several new functionalities have been added in CSS 3
- In this section, we will be having a look at the following CSS 3 properties :
  - *border-radius*
  - *text-shadow*
  - *box-shadow*
  - *border-image*
  - *background-size*
  - *transform-rotate*
  - *transform-scale*
  - *transform-skew*
  - *transition*

---

## CSS 3 Border Radius Property

- You can use ***border-radius*** property to add rounded borders to html elements.
- You can also specify different values for four corners in the following manner :

```
border-top-left-radius: 20px;  
border-top-right-radius: 20px;  
border-bottom-right-radius: 30px;  
border-bottom-left-radius: 30px;
```

---

## Demo : border-radius

```
<!DOCTYPE html>
<html><head>
<style>
Div {
border:2px solid #111111;
padding:10px 40px;
background:#aa00ee;
width:300px;
border-radius:25px;
}
</style>
</head>
<body>
<div>The border-
radius property allows you to add rounded corners to elements.</div>
</body></html>
```

### Output :

The border-radius property allows you to add rounded corners to elements.

---

## CSS 3 Text Shadow Property

- You can use *text-shadow* property to apply shadow to text.
- `text-shadow: h-shadow v-shadow blur color;`

Where

*h-shadow* is the horizontal shadow.

*v-shadow* is the vertical shadow.

*blur* is the blur distance.

*color* is the color of shadow.



---

## Demo : text-shadow

```
<html>
<head>
<style>
h1 {
text-shadow: 10px 10px 2px #110000,
}
</style>
</head>
<body>
<h1>This example demonstrates text shadow</h1>
</body>
</html>
```

**Output :**

**This example demonstrates text shadow**  
*This example demonstrates text shadow*

---

## CSS 3 Box Shadow Property

- You can use *box-shadow* property to attach one or more drop shadows to the box.
- `text-shadow: h-shadow v-shadow blur spread color;`

Where

*h-shadow is the horizontal shadow.*

*v-shadow is the vertical shadow.*

*blur is the blur distance.*

*spread is the size of the shadow.*

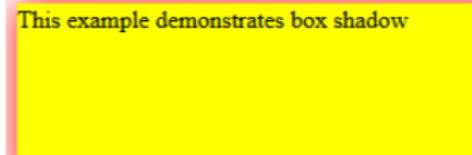
*color is the color of shadow.*

---

## Demo : box-shadow

```
<!DOCTYPE html>
<html>
<head>
<style>
div {
width:300px;
height:100px;
background-color:yellow;
box-shadow: 10px 10px 25px 10px #ff0000;
}
</style>
</head>
<body>
<div>This example demonstrates box shadow</div>
</body>
</html>
```

**Output :**



This example demonstrates box shadow

---

## CSS 3 Border Image Property

- You can use border-image shorthand property for setting up border-image-source, border-image-width, border-image-repeat properties.
- ***border-image:url(wonder.bmp) 30 30 round;***
- Where, *url* is used to specify the image file

---

## Demo : border-image

```
<!DOCTYPE html>
<html>
<head>
<style>
div{
border:15px solid transparent;
width:250px;
padding:10px 20px;
}
#tiled {
border-image:url(wonder.bmp) 30 30 round;
}
```

---

## Demo : border-image (Contd.).

```
#stretch {  
border-image:url(wonder.bmp) 30 30 stretch;  
}  
</style>  
</head>  
<body>  
<p>The border-image property specifies an image to be used as a border.</p>  
<div id="tiled">Here, the image is tiled (repeated) to fill the area</div>  
<br>  
<div id="stretch">Here, the image is stretched to fill the area</div>  
<p>Image that was used for demonstration :</p>  
  
</body>  
</html>
```

## Demo : border-image (Contd.).

### Output :

The border-image property specifies an image to be used as a border.

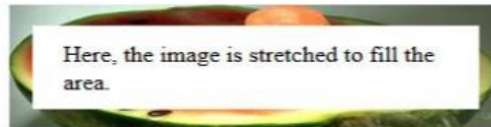
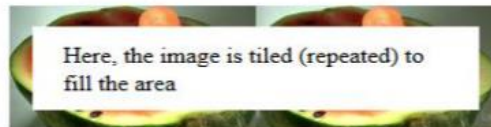


Image that was used for demonstration :



---

## Demo : background-size

- Using this property, we will see how the background image grows in size as we keep appending the text.

```
<html>
<head>
<style>
div {
background:url(wonder.bmp) ;
background-size:100% 100%;
background-repeat:no-repeat;
}
</style>
</head>
```



---

## Demo : background-size (Contd.).

```
<body >
```

```
<div style = "font-Family:arial; color:yellow; font-size:80px;">
```

```
Welcome to Wipro.
```

```
</div>
```

```
</body>
```

```
</html>
```

**Output :**



---

## Quiz

1. If we want to have a div element with box shadow effect having vertical shadow of 10px, horizontal shadow of 20px, the spread size as 40px, a blur distance of 30px and the color of shadow as red, which one of the following we will have to use:
  - a) `div { box-shadow: 40px 30px 20px 10px #ff0000; }`
  - b) `div { box-shadow: 10px 20px 30px 40px #ff0000; }`
  - c) `div { box-shadow: 20px 10px 30px 40px #ff0000; }`
  - d) `div { box-shadow: 20px 10px 40px 30px #ff0000; }`

---

## transform:rotate method

- When you use *transform:rotate* method, the element rotates clockwise at a given degree.
- If you want rotation in anti-clockwise direction, use negative values.

---

## Demo : transform:rotate

```
<html>
<head>
<style>
div{
width:200px;
height:100px;
background-color:yellow;
/* Rotate div */
transform:rotate(30deg);
}
</style>
</head>
```

---

## Demo : transform:rotate (Contd.).

```
<body>
```

```
<p style="font-family:arial; color:red; font-size:20px;">
```

```
This example is a demonstration of rotating a part of HTML Document
```

```
</p>
```

```
<div>Hello, Welcome to Cascading Style Sheets Version 3
```

```
</div>
```

```
</body>
```

```
</html>
```

**Output :**

This example is a demonstration of rotating a part of HTML Document

Hello, Welcome to Cascading  
Style Sheets Version 3

---

## transform:scale method

- When you use *transform:scale* method, the element increases or decreases in size, depending on the parameters given for the width (X-axis) and the height (Y-axis)
- The value scale(2,3) transforms the width to betwice its original size and the height thrice its original size.

---

## Demo : transform:scale method

```
<html>
<head>
<style>
div {
width:200px;
height:100px;
margin: 0px auto;
background-color:yellow;
}
div#div2 {
background-color:cyan;
transform:scale(2,3);
}
</style>
</head>
```

---

## Demo : transform:scale method (Contd.).

```
<body align="centre">
<p style="font-family:arial; color:red; font-size:20px;">
  This example is a demonstration of transform:scale method
</p>
<p align="center">
<div>Hello, Welcome to the training on CSS3</div>
<br><br><br><br><br>
<div align="center" id="div2" >
Hello, Welcome to the training on CSS3
</div>
</p>
</body>
</html>
```



---

## Demo : transform:scale method (Contd.).

This example is a demonstration of transform:scale method

**Output :**

Hello, Welcome to the training  
on CSS3

Hello, Welcome to the training  
on CSS3

---

## transform:skew method

- When you use the *transform:skew* method, the element turns in a given angle, depending on the parameters given for the horizontal(X-axis) and the vertical(Y-axis) lines:
- The value `skew(35deg,25deg)` turns the element 35 degrees around the X-axis and 25 degrees around the Y-axis.

---

## Demo : transform:skew method

```
<html>
<head>
<style>
div {
width:200px;
height:100px;
margin: 0px auto;
background-color:yellow;
}
div#div2 {
background-color:cyan;
transform:skew(35deg,25deg);
}
</style>
</head>
```

---

## Demo : transform:skew method (Contd.).

```
<body align="centre">
<p style="font-family:arial; color:red; font-size:20px;">
  This example is a demonstration of transform:skew method
</p>
<p align="center">
<div>Hello, Welcome to the training on CSS3</div>
<br>
<div align="center" id="div2" >
Hello, Welcome to the training on CSS3
</div>
</p>
</body>
</html>
```

---

## Demo : transform:skew method (Contd.).

### Output :

This example is a demonstration of transform:skew method



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## CSS3 Transitions

- With CSS3, an effect can be added, when changing from one style to another, without using Javascript or Flash animation.
- CSS3 transitions are effects that let an element gradually change from one style to another.
- For transition effect, we must :
  - Specify the CSS property for which we want to add an effect.
  - Specify the duration of this effect.

---

## Demo : CSS Transition

```
<html>
<head>
<style>
div{
width:100px;
height:100px;
background:red;
transition:width 2s, height 2s;
}
div:hover{
width:200px;
height:200px;
transform:rotate(180deg);
}
```

---

## Demo : CSS Transition (Contd.).

```
</style>
</head>
<body>
<p><b> Demonstration of Transition</b></p>
<div>Please hover over this object to see the transition effect!
</div>
</body>
</html>
```

### Output :

**Demonstration of Transition**





---

## Quiz

```
div1 {transform:rotate(30deg);}
```

```
div2 {transform:rotate(-30deg);}
```

*Related to the code given above, which of the following statement is true :*

- a) div1 rotates 30 degrees anti-clockwise while div2 rotates 30 degrees clockwise
- b) div1 rotates 30 degrees clockwise while div2 rotates 30 degrees anti-clockwise
- c) Negative values have no effect. Both div1 and div2 rotate 30 degrees in clockwise direction.
- d) Negative values have no effect. Both div1 and div2 rotate 30 degrees in anti-clockwise direction.

---

## Summary

- **In this sub-module, you were able to**
  - Explore the new features introduced in CSS3
  - Set shadows for box and text
  - Use enhanced border properties
  - Use enhanced background properties
  - Explore transform and transition properties



Thank You