CSS 2D Transforms

The CSS transform property applies a 2D or 3D transformation to an element. This property allows you to rotate, scale, move, and skew elements.

Mouse over the element below to see a 2D transformation: **2D**

rotate

CSS 2D Transforms Functions

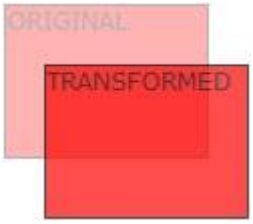
With the CSS transform property you can use the following 2D transformation functions:

- translate()
- rotate()
- scaleX()
- scaleY()
- scale()
- skewX()
- skewY() • skew()
- matrix()

The CSS translate() Function

The translate() function moves an element from its current position (according to the parameters given for the X-axis and the Y-axis).

The following example moves the element 50 pixels to the right, and 100 pixels down from its current position:



Example

```
div {
  transform: translate(50px, 100px);
}
```

The CSS rotate() Function

The rotate() function rotates an element clockwise or counter-clockwise according to a given degree.

The following example rotates the element clockwise with 20 degrees:

Example

```
div {
  transform: rotate(20deg);
}
```

Using negative values will rotate the element counter-clockwise.

The following example rotates the element counter-clockwise with 20 degrees: Example

```
div {
  transform: rotate(-20deg);
}
```

The CSS scale() Function

The scale() function increases or decreases the size of an element (according to the parameters given for the width and height).

The following example increases the element to be two times of its original width, and three times of its original height:

Example

```
div {
  transform: scale(2, 3);
}
```

The following example decreases the element to be half of its original width and height: Example

```
div {
  transform: scale(0.5, 0.5);
}
```

The CSS scaleX() Function

The scaleX() function increases or decreases the width of an element.

The following example increases the element to be two times of its original width:

Example

```
div {
  transform: scaleX(2);
}
```

The following example decreases the element to be half of its original width: Example

```
div {
  transform: scaleX(0.5);
}
```

The CSS scaleY() Function

The scaleY() function increases or decreases the height of an element.

The following example increases the element to be three times of its original height: Example

```
div {
  transform: scaleY(3);
}
```

The following example decreases the element to be half of its original height: Example

```
div {
  transform: scaleY(0.5);
}
```

The CSS skewX() Function

The skewX() function skews an element along the X-axis by the given angle.

The following example skews the element 20 degrees along the Xaxis:

Example

```
div {
  transform: skewX(20deg);
}
```

The CSS skewY() Function

The skewY() function skews an element along the Y-axis by the given angle.

The following example skews the element 20 degrees along the Yaxis:

Example

```
div {
  transform: skewY(20deg);
}
```

The CSS skew() Function

The skew() function skews an element along the X and Y-axis by the given angles.

The following example skews the element 20 degrees along the

Xaxis, and 10 degrees along the Y-axis: **Example**

```
div {
  transform: skew(20deg, 10deg);
}
```

If the second parameter is not specified, it has a zero value. So, the following example skews the element 20 degrees along the X-axis:

Example

```
div {
  transform: skew(20deg);
}
```

The CSS matrix() Function

The matrix() function combines all the 2D transform functions into one.

The matrix() function take six parameters, containing mathematic functions, which allows you to rotate, scale, move (translate), and skew elements.

The parameters are as follow: matrix(scaleX(), skewY(), skewX(), scaleY(), translateX(), translateY())

Example

```
div {
  transform: matrix(1, -0.3, 0, 1, 0, 0);
```

}

CSS 3D Transforms

The CSS transform property applies a 2D or 3D transformation to an element. This property allows you to rotate, scale, move, and skew elements.

CSS 3D Transforms Functions

With the CSS transform property you can use the following 3D transformation functions:

- rotateX()
- rotateY()
- rotateZ()

The CSS rotateX() Function

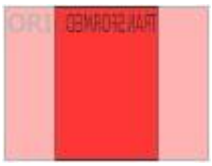
The rotateX() function rotates an element around its X-axis at a given degree:

Example

```
#myDiv {
  transform: rotateX(150deg);
}
```

The CSS rotateY() Function

The rotateY() function rotates an element around its Y-axis at a given degree:



Example

```
#myDiv {
  transform: rotateY(150deg);
}
```

The CSS rotateZ() Function

The rotateZ() function rotates an element around its Z-axis at a given degree: Example

```
#myDiv {
  transform: rotateZ(90deg);
}
```
