

Transforms in CSS

Overview

CSS Transforms is used to translate, rotate, scale, and skews elements. Transformation is an effect used to **change shape, size and position**.

There is two type of transformation - **2D and 3D** transformation.

Transform Method	Remarks
translate(x,y)	It is used to transform the element along X-axis and Y-axis
translateX(n)	It is used to transform the element along X-axis
translateY(n)	It is used to transform the element along Y-axis
rotate()	It is used to rotate the element based on an angle
scale(x,y)	It is used to change the width and height of an element
scaleX(n)	It is used to change the width of an element
scaleY(n)	It is used to change the height of an element
skewX()	It specifies the skew transforms along with X-axis
skewY()	It specifies the skew transforms along with Y-axis
matrix()	It specifies matrix transforms

translate()

This method moves an element from its current position according to the given parameters, i.e. X-axis and Y-axis.

Example :

div{
 transform: translate(20,50) ;
 }
❖ It shifts the div 20px right and 50 down.

rotate()

This method rotates an element clockwise or anticlockwise according to a given degree in the parameter.

- Positive Degree Parameter - Rotate clockwise
- Negative Degree Parameter - Rotate anti-clockwise

Example :

div{
 transform: rotate(60) ;
 }
❖ It rotates the div 60 deg clockwise.

scale()

This method increases or decreases the size of an element according to the parameters given for the width and height.

Syntax : scale (width , height) ;

Example :

div{
 transform: scale(2 , 4) ;
 }
❖ The size of the element becomes : twice the original width, thrice the actual height.

Example2:

div{
 transform: scale(0.5 , 2) ;
 }

- ❖ Size of the element becomes : half the original width, twice the original height

scaleX() and scaleY()

scaleX() increases or decreases the size of an element along the X-axis, i.e. **width**.

scaleY() increases or decreases the size of an element along the Y-axis,i.e. **height**.

Example : `scaleX(2);`

- ❖ Increases the width of element by 2 times.

`scaleY(0.5);`

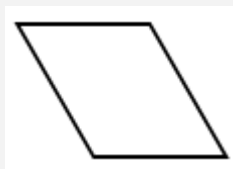
- ❖ Decreases the height of element by half.

skewX() and skewY()

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

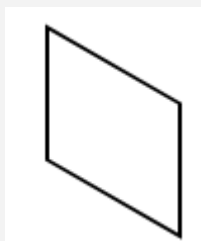
skewY() : skews an element along the Y-axis by the given angle.

Example : `skewX(30deg);`



Output :

Example : `skewY(30deg);`



Output :

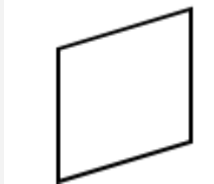
matrix()

This method combines all the 2D transform methods and passes them into parameters.

It takes six parameters : rotate, scale, move (translate), and skew elements.

Syntax : `matrix(scaleX() , skewY() , skewX() , scaleY() , translateX() , translateY())`

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



Browser :