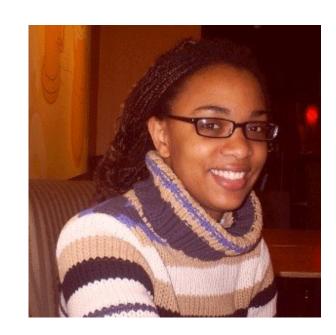
# CSS Transition and 2D Transform



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#### Definition

CSS Transform allows elements styled in CSS to be transformed in two-dimensional.

Source: http://www.w3.org/TR/css3-transforms/

# transform-property

Shape

Size

**Position** 

Introduction to 2D Transform Methods

2D Transition Demonstrations

Tutorials

#### What You Need

**Code Editor** 



Modern Browser



**Demo Files** 



### Introduction to 2D Transform Methods

#### The Transform Methods

Skew()

Scale()

Rotate()

Translate()

Skew()

skews element along X and Y-axis

Skew(20deg, 10deg)

20 degrees on the X-axis

Skew(20deg, 10deg)

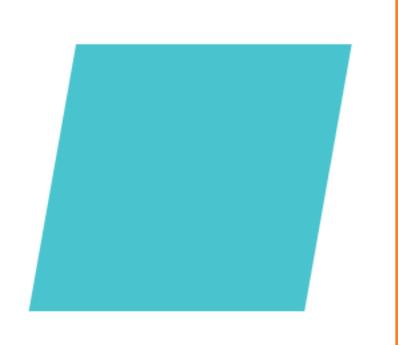
20 degrees on the X-axis 10 degrees on the Y-axis Skew()

skewX()

skewY()

# SkewX(20deg)

X-axis by 20degrees



# SkewX(-20deg)

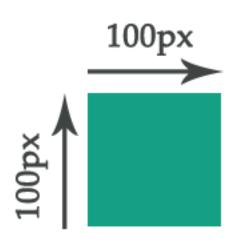
X-axis by 20degrees

# Scale()

Increases or decreases the size of an element

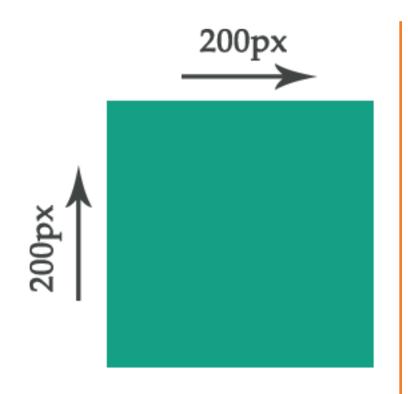
# Scale(width, height)

Increases or decreases the size of an element



# Scale()

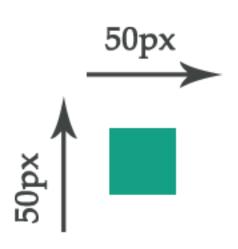
width = 100pxheight = 100px



# Scale(2,2)

width = 200px

height = 200px



Scale(0.5,0.5)

width = 50px

height = 50px

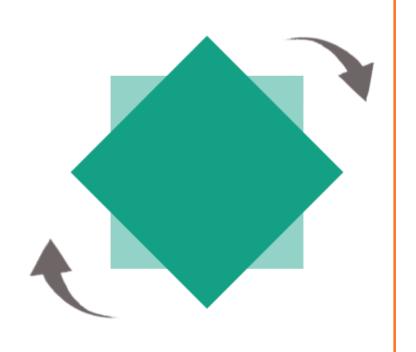
Scale()

ScaleX()

ScaleY()

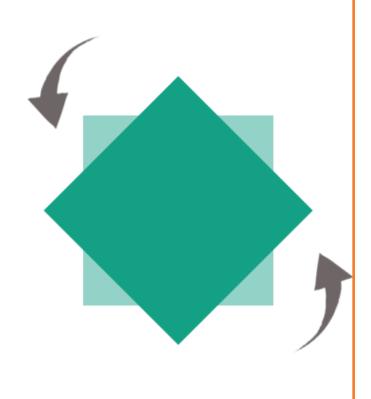
### Rotate()

Rotates an element clockwise or counter-clockwise according to a given degree.



# Rotate(90deg)

rotates clockwise



### Rotate(-90deg)

rotates counter-clockwise

# Translate()

### Translate(X-axis, Y-axis)

# Translate(X-axis, Y-axis)

# Translate(X-axis, Y-axis)

# Translate()

TranslateX()

TranslateY()

# TranslateX(50px)

Moves the element 50px to the right

# TranslateX(-50px)

Moves the element 50px to the left



# TranslateY(50px)

Moves the element 50px to the bottom



# TranslateY(-50px)

Moves the element 50px to the top



#### 2D Transition Demonstrations

The Transform-property
Browser Support

```
.box {
  height: 100px;
  width: 100px;
  background-color: red;
}
```

**Initial State** 

```
.box {
height: 100px;
width: 100px;
background-color: red;
}
```

Final State

#### **Syntax**

transform: function(parameters)

transform: skew(parameters)

**Initial State** 

```
.box {
height: 100px;
width: 100px;
background-color: red;
}
.box:hover {
transform: skewX(20deg);
}
```

Final State

```
.box {
    height: 100px;
    width: 100px;

background-color: red;
}
transition: transform 2s;
}
Initial State
    .box:hover {
    transform: skewX(20deg);
    transform: skewX(20deg);
    Final State
```

```
.box {
    height: 100px;
    width: 100px;

background-color: red;
}
transition: transform 2s;
}
Initial State
    .box:hover {
    transform: skewX(20deg);
    background-color: red;
}
```

```
.box {
height: 100px;
width: 100px;
background-color: red;
transition: transform 2s;
}
Initial State
```

```
.box:hover {
  -webkit-transform: skewX(20deg);
  -moz-transform: skewX(20deg);
  -o-transform: skewX(20deg);
  -ms-transform: skewX(20deg);
  transform: skewX(20deg);
}
Final State
```

```
.box {
                                   .box:hover {
height: 100px;
                                   -webkit-transform: skewX(20deg);
width: 100px;
                                   -moz-transform: skewX(20deg);
background-color: red;
                                   -o-transform: skewX(20deg);
transition: transform 2s;
                                   -ms-transform: skewX(20deg);
-webkit-transition: transform 2s; transform: skewX(20deg);
-moz-transition: transform 2s;
-o-transition: transform 2s;
-ms-transition: transform 2s;
transition: transform 2s;
```

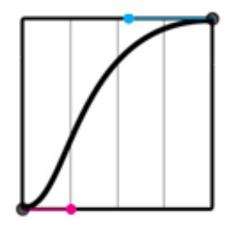
linear

ease

ease-in

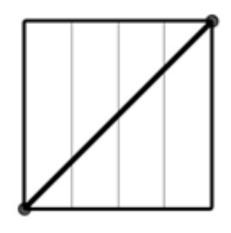
ease-out

ease-in-out



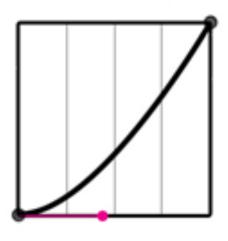
ease (default)

starts slow ends slow



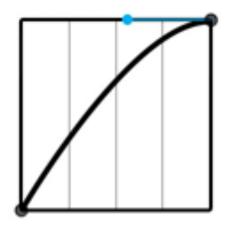
linear

same speed



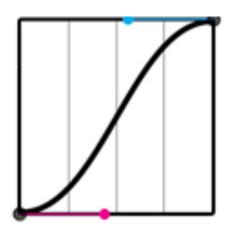
ease-in

starts slow ends fast



ease-out

starts fast ends slow



ease-in-out

starts slow ends slow

# ease (default)



### ease-in-out

