```
Animation and effects cheat sheet
Transform property
Syntax
transform: transform function-values
Example
    3
         }
Keyword-value type: none
         .sample-class {
    2
              transform: none;
    3
Function-value type: matrix()
Variations: matrix(), matrix3d()
         .sample-class {
    2
               transform: matrix(1.0, 2.0, 3.0, 4.0, 5.0, 6.0);
    3
         }
Function-value type: rotate(deg)
Variations: rotate(), rotate3d(), rotateX(), rotate(), rotateZ()
         .sample-class {
    2
              transform: rotate3d(3,2,1, 100deg);
    3
         }
Note: In rotate3d(), the respective values represent x, y, z co-ordinate and degree of rotations
Function-value type: translate(x,y)
Variations: translate(), translate3d(), translateX(), translateY(), translateZ()
         .sample-class {
    2
              transform: translate3d(10px, 20px, 30px);
    3
         }
Note: In translate3d(), the respective values represent translation along the x, y, z co-ordinates
Function-value type: scale(factor)
Variations: scale(), scale3d(), scaleX(), scaleY(), scaleZ()
    1
         .sample-class {
```

2

3

transform: scale3d(2, 1, 0.3);

Note: In scale3d(), the respective values represent scaling times along the x, y, z co-ordinates

Function-value type: skew(deg, deg)

Global value types:

```
.sample-class {
1
2
        transform: inherit;
3
    }
1
    .sample-class {
2
        transform: initial;
3
    }
1
    .sample-class {
2
        transform: revert;
3
    }
    .sample-class {
1
2
        transform: revert-layer;
3
    }
1
    .sample-class {
2
        transform: unset;
3
    }
```

Multiple transform over the same element

Syntax

Transform can be applied for rotate(), scale() and translate() that can be listed together. Each of these properties can have their own values and the actions will give a combined effect.

Example

```
1 .sample-class {
2     transform: rotate(45deg) scale(1.5) translate(45px);
3 }
```

Additional property under transform:transform-origin

Determines the anchor point for the centering of transform.

```
Example
```

```
1  .sample-class {
2     transform-origin: 10px 10px;
3  }
3 }
```

Transition property

Transition shorthand

Transition shorthand has four following sub-properties, each of which can also be individually defined.

transition-property

transition-duration

transition-timing-function

transition-delay

You have to list the values without naming them individually. Values skipped will be assigned their default values.

Syntax

transition: property duration timing-function delay;

Example

transition: margin-left2s ease-in-out 0.5s;

Animations and @keyframes

animation property:

Syntax

animation: name duration timing-function delay iteration-count direction fill-mode play-state;

Example

```
1 .sample-class {
2     animation: none 2 ease 0.5 4 normal none running;
3 }
```

The animation property is a shorthand for the sub-properties below:

```
1 animation-name
```

- 2 animation-duration
- 3 animation-timing-function
- 4 animation-delay
- 5 animation-iteration-count
- 6 animation-direction
- 7 animation-fill-mode
- 8 animation-play-state

The values not mentioned are given default values.

Animation-name property is used to tie-in the @keyframes rule.

@keyframes

Syntax

```
@keyframes mymove {
    1
    2
          from {property: value}
    3
          to { property: value }
    4
        }
Example
        @keyframes animation-name {
    1
    2
            from {bottom: 0px;}
    3
            to {bottom: 100px;}
    4
```

Percentage denotes the timing of the animation.

Alternative syntax

```
1  @keyframes animation-name {
2  /* declare actions here */
3  }
```

Example

```
1  @keyframes animation-name {
2    0%,100%{
3         background-color: blue;
4    }
5    50% {
6         background-color: green;
7    }
8 }
```

Multiple animations

Works the same as regular animation, multiple rules can be set.

```
1  #some-class{
2    animation: animation-a 2s linear infinite alternate,
3    animation-b 3s ease infinite alternate;
4 }
```