Web Developer

HTML, CSS e Strumenti di Digital Marketing (SEO, SEM, SEA)

Docente: Shadi Lahham

Shadows, gradients & animations

Decorative effects

Shadi Lahham - Web development

Shadows

Box shadow

used to draw shadow effects around an element

```css
.box {
  width: 200px;
  height: 200px;
}

.box.ocra {
  background-color: #caae3f;
}
```

© Shadi Lahham

4

Box shadow

can have X and Y offsets, blur, spread radius, and color

```css
.shadow {
  box-shadow: 9px 9px rgba(0, 0, 0, 0.2);
}
```

© Shadi Lahham

5

Box shadow

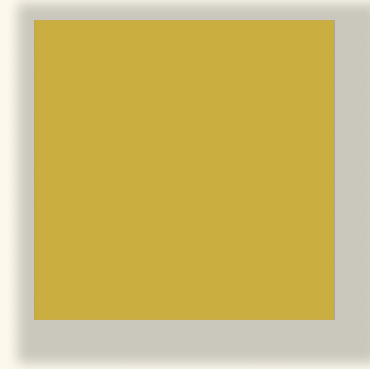can have X and Y offsets, blur, spread radius,
and color

```
.shadow-blur {
  box-shadow: 9px 9px 9px rgba(0, 0, 0, 0.2);
}
```

Box shadow

can have X and Y offsets, blur, spread radius, and color

```
.shadow-spread {
  box-shadow: 9px 9px 9px 20px rgba(0, 0, 0,0.2);
}
```
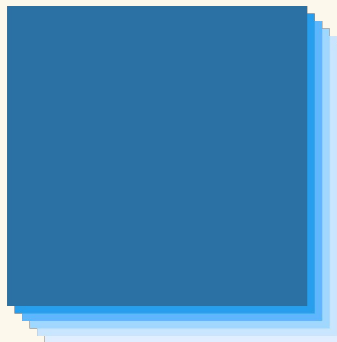
© Shadi Lahham

7

Box shadow

multiple shadows can be used at the same time on
the same element

```css
.box.blue {
  background-color: #2b71a3;
}


.shadow-tail {
  box-shadow: 5px 5px 0px 0px #289fed,
    10px 10px 0px 0px #5fb8ff,
    15px 15px 0px 0px #a1d8ff,
    20px 20px 0px 0px #cae6ff,
    25px 25px 0px 0px #e1eeff,
    5px 5px 15px 5px rgba(0, 0, 0, 0);
}
```

box-shadow | MDN

© Shadi Lahham

Text shadow

```
adds shadows to text
can have X and Y offsets, blur, and color

.shadow-text {
  font-size: 40px;
  text-shadow: 4px 4px 4px rgba(82, 77, 77, 0.6);
}
```

I have a shadow

© Shadi Lahham

Text shadow

multiple shadows can be used at the same time on the same text

```
.shadow-multi-text {
  font-size: 40px;
  color: #2b71a3;
  text-shadow: 5px 5px 0px #289fed,
   10px 10px 0px #5fb8ff,
   15px 15px 0px #a1d8ff,
   20px 20px 0px #cae6ff,
   25px 25px 0px #e1eeff,
   5px 5px 15px rgba(0, 0, 0, 0);
}
```

text-shadow | MDN

More shadows

© Shadi Lahham

Gradients

Gradients

transition between two or more colors, usually
used as a background

```
background: linear-gradient(
  90deg,
  hsla(302, 82%, 76%, 1) 0%,
  hsla(258, 40%, 68%, 1) 100%
);
```
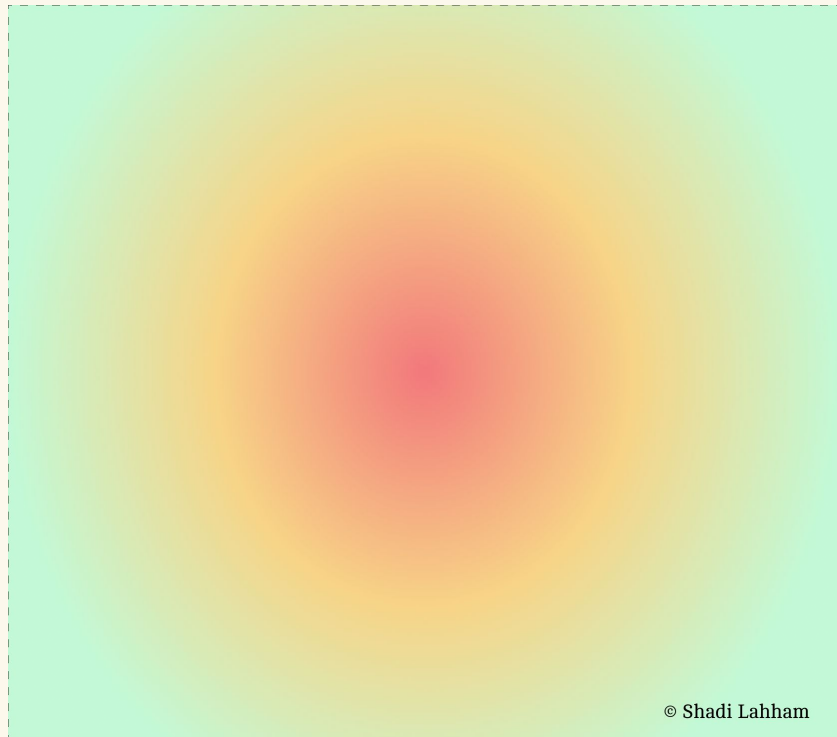
linear-gradient() | MDN

© Shadi Lahham

Gradients

could be either linear or radial

```css
background: radial-gradient(
  circle,
  hsla(358, 82%, 71%, 1) 0%,
  hsla(41, 88%, 75%, 1) 50%,
  hsla(141, 81%, 87%, 1) 100%
);
```

radial-gradient() | MDN

© Shadi Lahham

Gradients

using multiple and transparent colors

```
background: linear-gradient(
  135deg,
  rgba(247, 89, 49, 1) 0%,
  rgba(233, 109, 94, 1) 62%,
  rgba(232, 111, 98, 0.7) 68%,
  rgba(224, 121, 121, 0) 100%
);
```

Gradient Maker
uiGradients
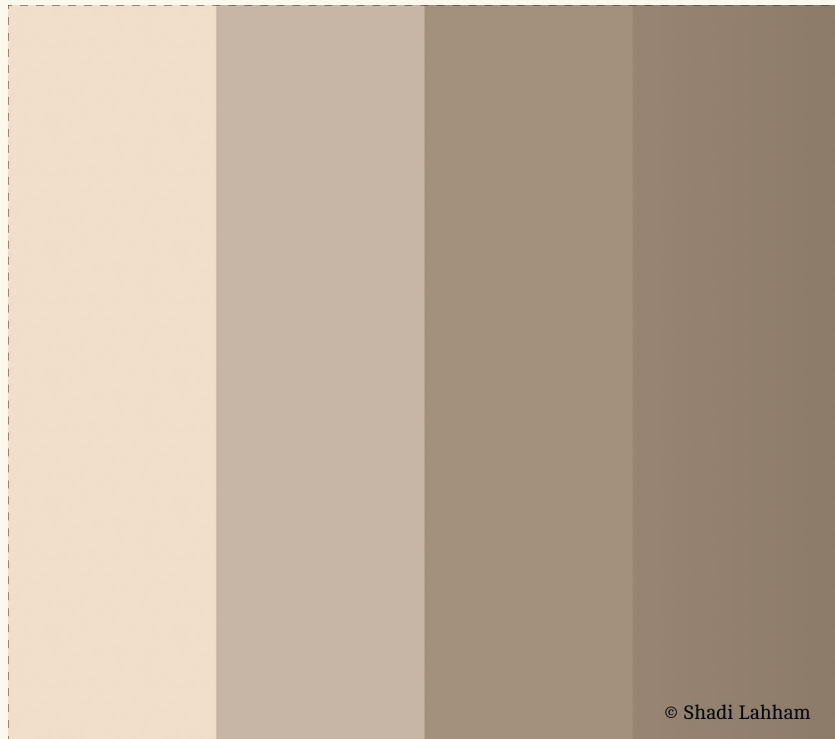CSS Gradient Generator

© Shadi Lahham

14

Gradients

```css
:root {
  --color-1: #f1dec9;
  --color-2: #c8b6a6;
  --color-3: #a4907c;
  --color-4: #8d7b68;
}

body {
  background: linear-gradient(
    90deg,
    var(--color-1) 0%,
    var(--color-1) 25%,
    var(--color-2) 25%,
    var(--color-2) 50%,
    var(--color-3) 50%,
    var(--color-3) 75%,
    var(--color-4) 75%,
    var(--color-4) 100%
  );
}
```

© Shadi Lahham

Transitions

Transition property

The CSS transition property is a powerful feature in CSS that allows you to control the intermediate steps in a CSS property change, creating smooth and gradual transitions between different states of an element

It is commonly used to enhance user experience by providing visual feedback when an element changes state, such as when it is hovered over, focused, or activated

Transition shorthand

the transition property is shorthand for four sub-properties

transition-property (default all)
the CSS property or properties to which the transition effect will be applied

transition-duration (default 0s)
the duration over which the transition takes place, specified in seconds or milliseconds

transition-timing-function (default ease)
how intermediate values of the transition are calculated
e.g. linear, ease, ease-in, ease-out, etc.

transition-delay (default 0s)
specifies the time to wait before starting the transition, also specified in seconds or milliseconds

example
transition: background-color 0.5s ease-in-out;

Transition example

```css
div {
  width: 100px;
  height: 100px;
  background-color: blue;
  transition: background-color 0.5s ease-in-out;
}

div:hover {
  background-color: green;
}
```

Multiple transitions

```css
/*  multiple transitions to animate size, shape (border-radius), and color on hover */
div {
  width: 100px;
  height: 100px;
  background-color: #dba34e;
  border-radius: 0;
  transition: width 1s ease-in-out, height 2s ease-in, background-color 0.5s ease-out,
    border-radius 1s ease-in-out;
}

div:hover {
  width: 200px;
  height: 200px;
  background-color: #ad60f5;
  border-radius: 8px;
}
```

Multiple transitions

Multiple transitions are beneficial for creating complex animations and enhancing user experience

However, excessive use can lead to distraction and performance issues

Use them wisely to avoid overwhelming users and maintain interface clarity

[CSS transitions and hover animations, an interactive guide](#)

Transformations

CSS transformations

Let developers manipulate the appearance of webpage elements dynamically to enable changes in position, size, and orientation without affecting the document flow

Through properties like `transform`, `translate`, `rotate`, and `scale`, developers can create visually engaging effects and animations effortlessly

They are crucial for crafting responsive designs, enhancing user interactions, and adding depth to web content, enabling the creation of captivating and interactive web experiences

Transformation properties

transform
main property used for applying transformations: translate, rotate, scale, skew, etc.

translate
moves an element from its current position (along the X and Y axes)

scale
increases or decreases the size of an element

rotate
rotates an element by a specified angle

skew
skews an element along the X and Y axes
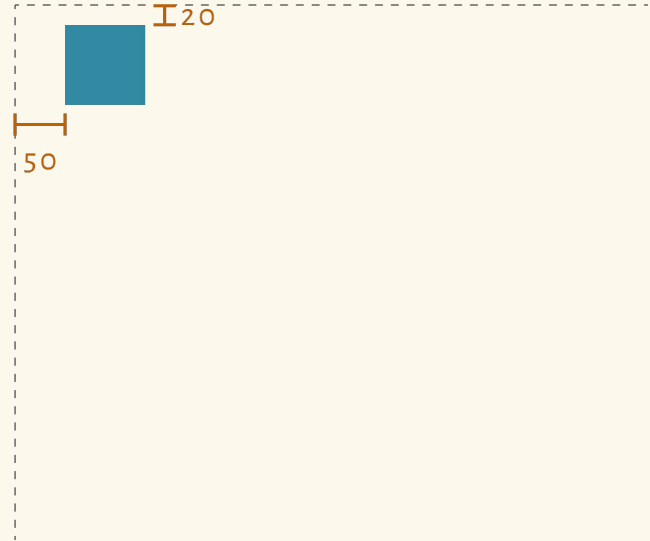
transform-origin
defines the point around which transformations are applied

Translate

```css
.box {
  width: 80px;
  height: 80px;
  background-color: #3189a4;
  /* added for smooth animation */
  transition: transform 0.3s ease-in-out;
}

.box:hover {
  /* move box 50px to the right and 20px down */
  transform: translate(50px, 20px);
}
```

20

50

Rotate

```css
.photo {
  width: 200px;
  height: 200px;
  background-color: #e09743;
  transition: transform 0.5s ease-in;
}

.photo:hover {
  /* rotate image by 45 degrees on hover */
  transform: rotate(45deg);
}
```

© Shadi Lahham

26
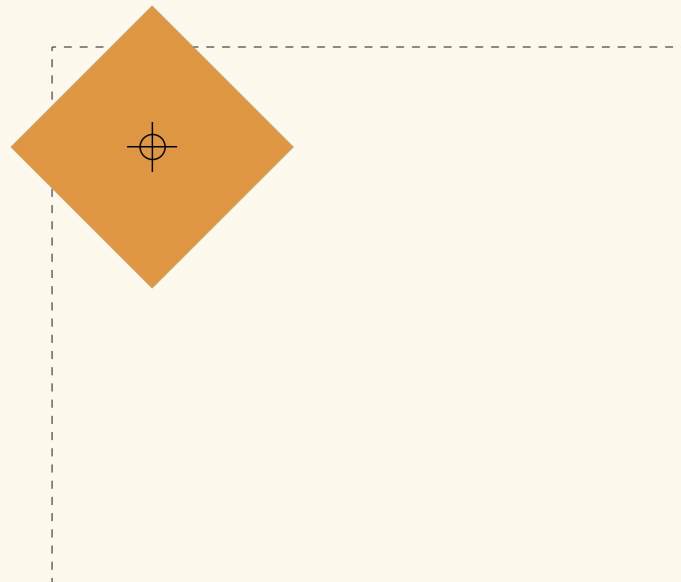
Rotate & transform-origin

```css
.rotating-image {
  width: 200px;
  height: 200px;
  background-color: #e25d5d;
  transition: transform 0.3s ease;
  /* set bottom-right as point of reference */
  transform-origin: bottom right;
}

.rotating-image:hover {
  /* rotate image by 72 degrees on hover */
  transform: rotate(0.2turn);
}
```
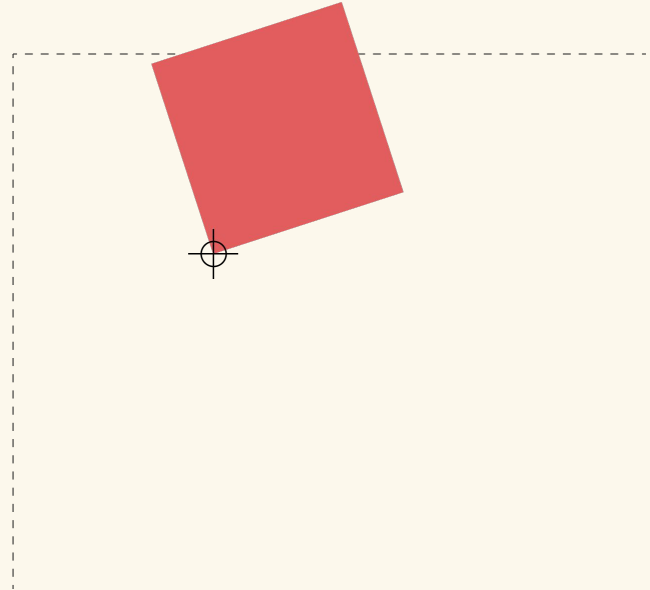
There is a turn unit in CSS

© Shadi Lahham

27

Scale

```css
.zoom-image {
  width: 100px;
  height: 150px;
  background-color: #b0d42d;
  transition: transform 250ms linear;
}

.zoom-image:hover {
  /* scale image by 20% on hover */
  transform: scale(1.2);
}
```

© Shadi Lahham

28
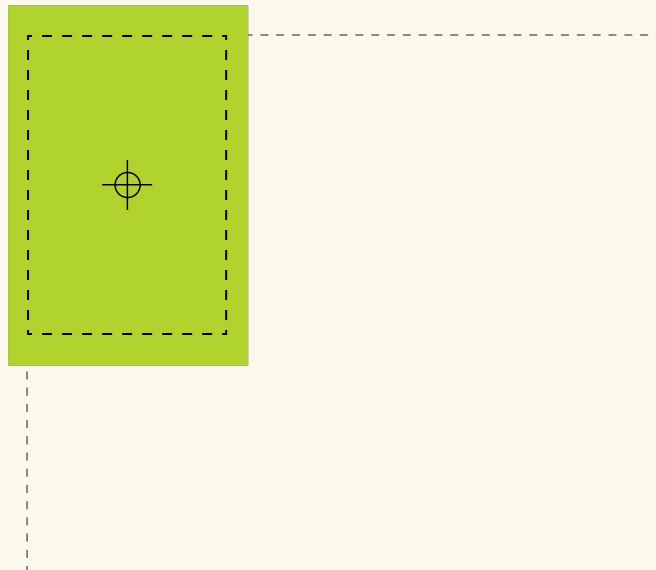
Scale & transform-origin

```css
.zoom-image.alt {
  width: 100px;
  height: 150px;
  background-color: #869c36;
  /* set top-left as point of reference */
  transform-origin: top left;
  transition: transform 250ms linear;
}

.zoom-image:hover {
  /* scale image by 20% on hover */
  transform: scale(1.2);
}
```

© Shadi Lahham
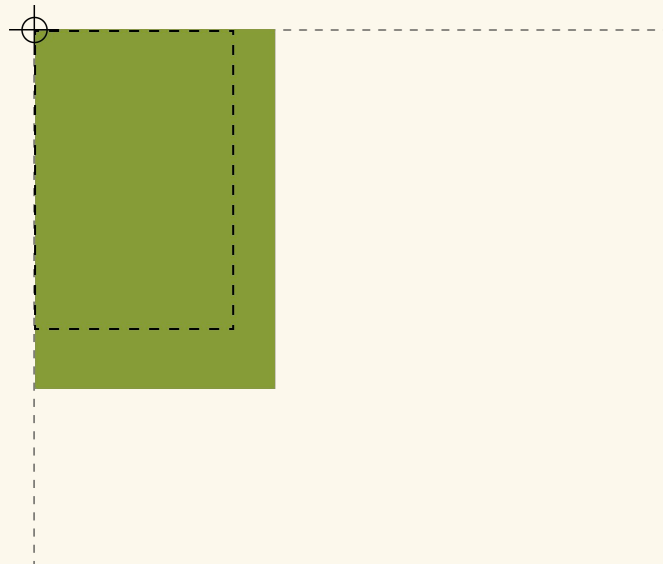
Multiple transformations

```css
.transformed-image {
  width: 100px;
  height: 240px;
  background-color: #aa3fb8;
  transition: transform 0.4s ease-out;
}

.transformed-image:hover {
  /* translates, rotates, and scales the image */
  transform: translate(40px, 40px) rotate(20deg) scale(1.4);
}
```
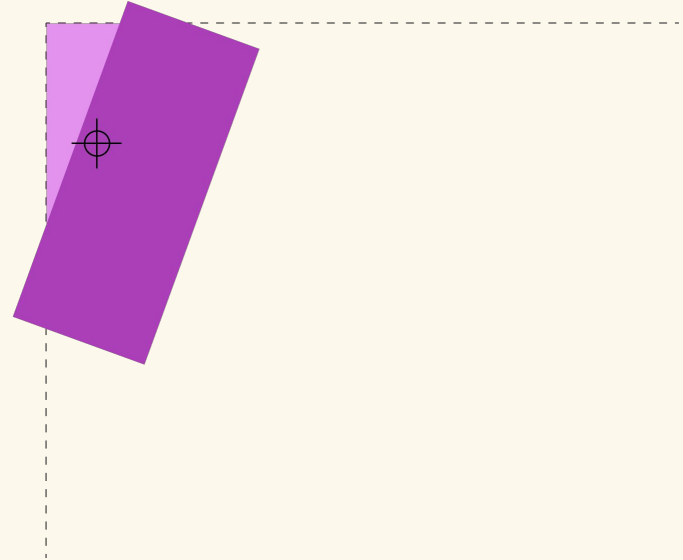
Animations

Keyframe animations

A powerful tool for creating dynamic and engaging web experiences by defining the intermediate steps, keyframes, between the initial and final states of an element's styling properties, such as position, size, color, and opacity

Designers can orchestrate smooth transitions and complex movements, adding visual interest and interactivity without JavaScript or external libraries

By specifying keyframes at various percentages of an animation's duration, developers can achieve precise control over the timing and behavior of elements, enhancing the overall user experience
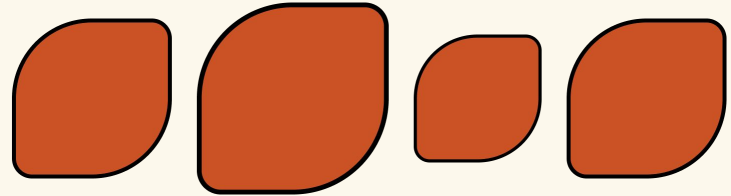
Keyframe animations

```css
/* define animation */
@keyframes beat {
  0% { transform: scale(1); }
  25% { transform: scale(1.1); }
  50% { transform: scale(0.9); }
  100% { transform: scale(1); }
}

.shape {
  width: 80px;
  height: 80px;
  background-color: #ca5225;
  border: 2px solid black;
  border-radius: 50% 10px;
  transition: transform 0.5s;
}
```

animation | MDN

```css
/* trigger animation on hover */
.shape:hover {
  animation: beat 2s infinite;
}
```

© Shadi Lahham

33

Keyframe animation generators

Keyframe animation generators simplify the process of creating CSS animations by providing user-friendly interfaces to visually design animations, saving time and effort in writing complex CSS code manually

Animista

Keyframe Animation CSS Generator

CSS Animation Kit

Your turn

1.Lights camera action

Create a presentation about CSS gradients, shadows, transitions, transformations, and animations

- Craft 15-30 slides detailing CSS features
- Include at least 8 code examples with your own original code
- Dedicate a section about box-shadow, gradient, and animation generators
- Provide references to sites with interesting CSS implementations
- Include your **html** and **css** files in the delivery

2.Stylish interactions

Create a web page to showcase various CSS effects
- Include a heading and a paragraph with some sample text
- Apply a linear gradient background to the heading
- Add a shadow to the paragraph text
- Use a transition to smoothly change the paragraph text color on hover
- Create a div and apply a transformation to rotate it 45 degrees
- Add an animation to the div that moves it from left to right continuously

Bonus: use radial gradient for the heading background and add a hover effect to pause the animation

References

[CSS Box Shadow](#)

[w3schools CSS Shadow Effects](#)

[CSS Tricks box-shadow](#)

[CSS Tricks text-shadow](#)

[w3schools CSS Gradients](#)

[w3schools CSS Radial Gradients](#)

[Button with Gradient and Shadow example](#)

References

[Using CSS animations | MDN](#)
[CSS Animations](#)

[30 Creative and Unique CSS Animations](#)