



Web page design

Cascading Style Sheets

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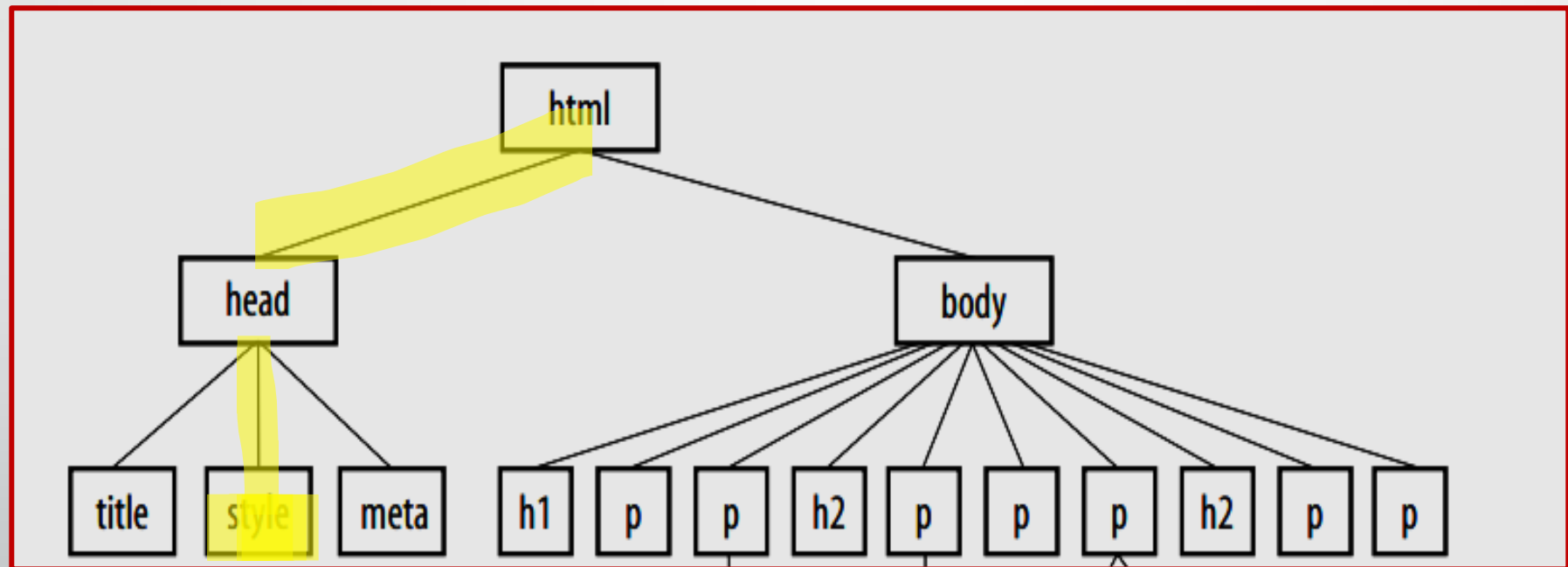
Introducing

- CSS1 was released in 1996 and CSS2 followed two years later. Work on CSS3 has been ongoing but the major browsers have already started to implement it.
- Browsers did not implement all CSS features at once. So some older browsers do not support every property.
- Before launching any new sit, you have to test it in more then one browser.

What is CSS?

- **CSS** stands for **Cascading Style Sheets**.
- CSS describes **how HTML elements are to be displayed on screen, paper, or in other media**.
- CSS **saves a lot of work**. It can control the layout of multiple web pages all at once.
- External stylesheets are stored in **CSS files**

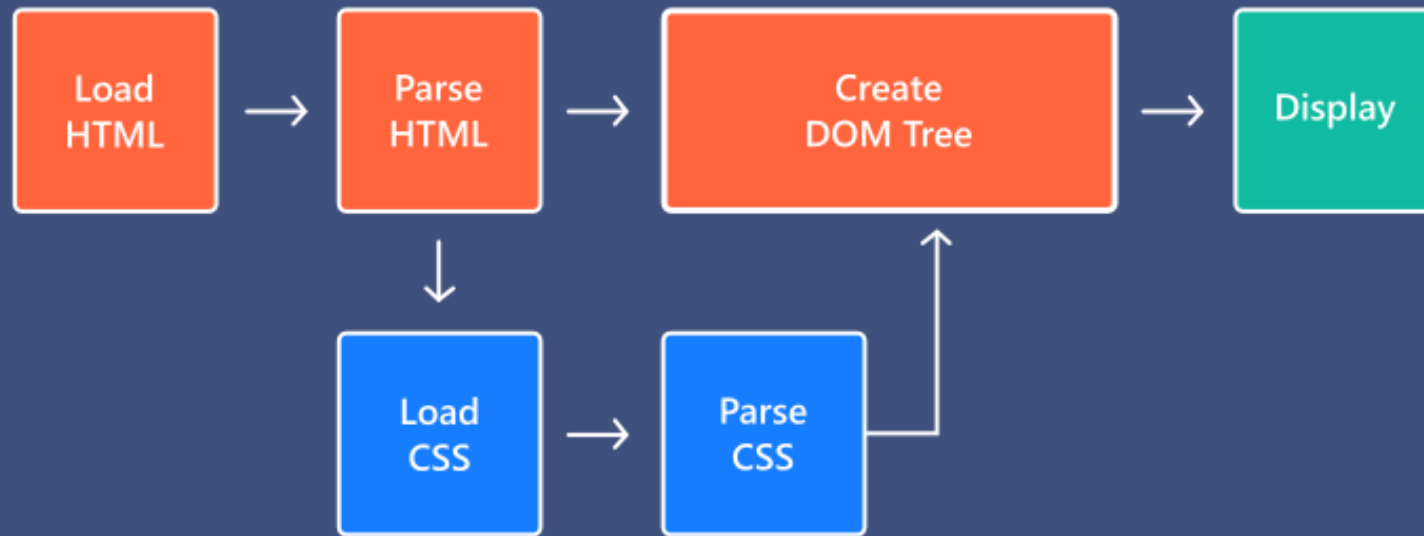
The document tree structure



Why use CSS ?

- CSS is used to define styles for your web pages, including the design, layout and variations in display for different devices and screen sizes.
- CSS Saves a Lot of Work.

How CSS Works



CSS associates style rules with HTML element

- CSS works by associating rules with HTML elements.
- These rules govern how the content of specified elements should be displayed.
- A CSS rule contains two parts: a selector and a declaration

CSS rule

Selectors : indicate which element the rule applies to.

- The same rule can apply to more than one element names element names with commas.

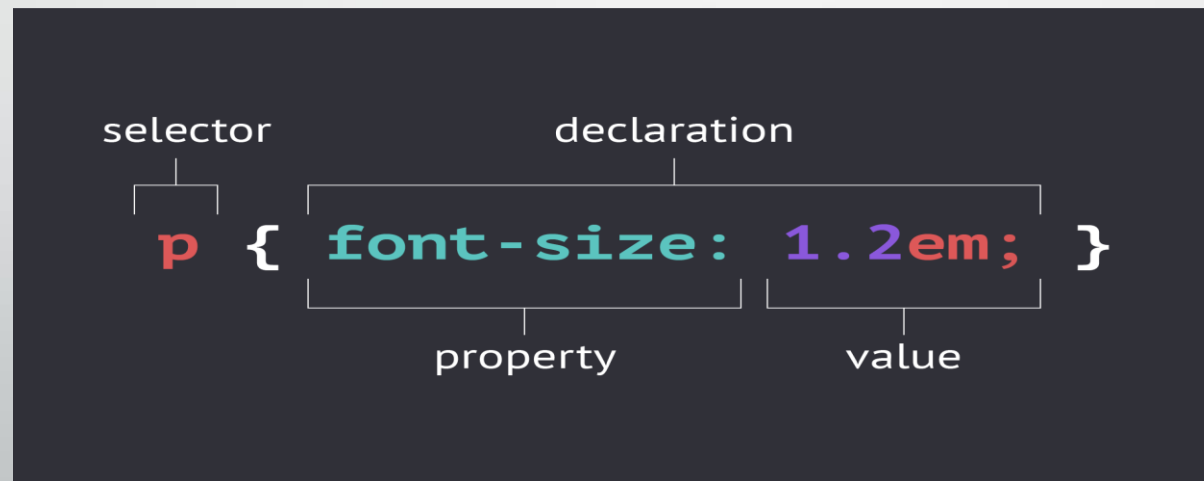
Declarations: indicate how the elements referred to in the selector should be styled. By using property and a value.

The diagram shows two examples of CSS rules within a red-bordered box. The first example, 'selector { property: value; }', has a blue label 'declaration' with a vertical line pointing to the 'property: value;' part, which is highlighted in yellow. The second example, 'selector { property1: value1; property2: value2; property3: value3; }', has a blue label 'declaration block' with a vertical line pointing to the entire block of declarations, which is highlighted in yellow.

```
selector { property: value; }
```

```
selector {  
  property1: value1;  
  property2: value2;  
  property3: value3;  
}
```

CSS Syntax



How To Add CSS

When a browser reads a style sheet, it will format the HTML document according to the information in the style sheet.

There are three ways of inserting a style sheet:

- External CSS.
 - Internal CSS.
 - Inline CSS.
- any HTML page can use more the one CSS style sheet.
 - To save the CSS file has to save as **name-file.css**

Using external CSS

- <link> element can be used in HTML document to tell the browser where to find the CSS file used to style the page.

href

This specifies the path to the CSS file (which is often placed in a folder called css or styles).

type

This attribute specifies the type of document being linked to. The value should be text/css.

rel

This specifies the relationship between the HTML page and the file it is linked to. The value should be stylesheet when linking to a CSS file.

```
<!DOCTYPE html>
<html lang="en">
<head>
|   <link rel="stylesheet" type="text/css" href="style.css">
</head>
<body>
|   <div class="parent">
```


Using internal CSS

- `<style>` you can also include CSS rules within an HTML page placing the inside a `<style>` element, which usually sits inside the `<head>` element of the page.

Using Inline CSS

- An inline style may be used to apply a unique style for a single element.
- To use inline styles, add the style attribute to the relevant element.
- The style attribute can contain any CSS property.

```
<!DOCTYPE html>
<html>
<head>
<title>internal and inline CSS sheet</title>
<style>
  /* internal css*/
  body {
    background-color: #linen;
  }
  h1 {
    color: #maroon;
  }
</style>
</head>
<body>
<h1>This is a heading</h1>
<p>This is a paragraph.</p>
<!-- inline CSS -->
<h2 style="color: #coral;"> inline CSS</h2>
</body>
</html>
```



CSS Selectors

Selector	Meaning	example
Universal selector	Applies to all elements in the document	* {}
Type selector	Matches element names	h1, h2, {}
Class selector	Matches an element whose class attribute has a value that matches the one specified after the period (or full stop) symbol	.note {} p.note {}
ID selector	Matches an element whose id attribute has a value that matches the one specified after the pound or hash symbol	#introduction
Child selector	Matches an element that is a direct child of another	Li>a {}
Descendant selector	Matches an element that is a descendent of another specified element (not just a direct child of that element)	P a {}
General sibling selector	Matches an element that is a sibling of another , although it dose not have to be the directly preceding element	h1 ~ p {} Two <p> that are siblings of an <h1> The rule would appple to both.
Adjacent selector	Matches an element that is the next sibling of another	h1+p {} Targets the fist <p>after <h1> but not other <p>

Comments

- Anything between the `/* your comment */`
- It will not be interpreted by the browser.
- The use of comments can help you to understand a CSS file and organize it, by splitting a long document into sections.

colors

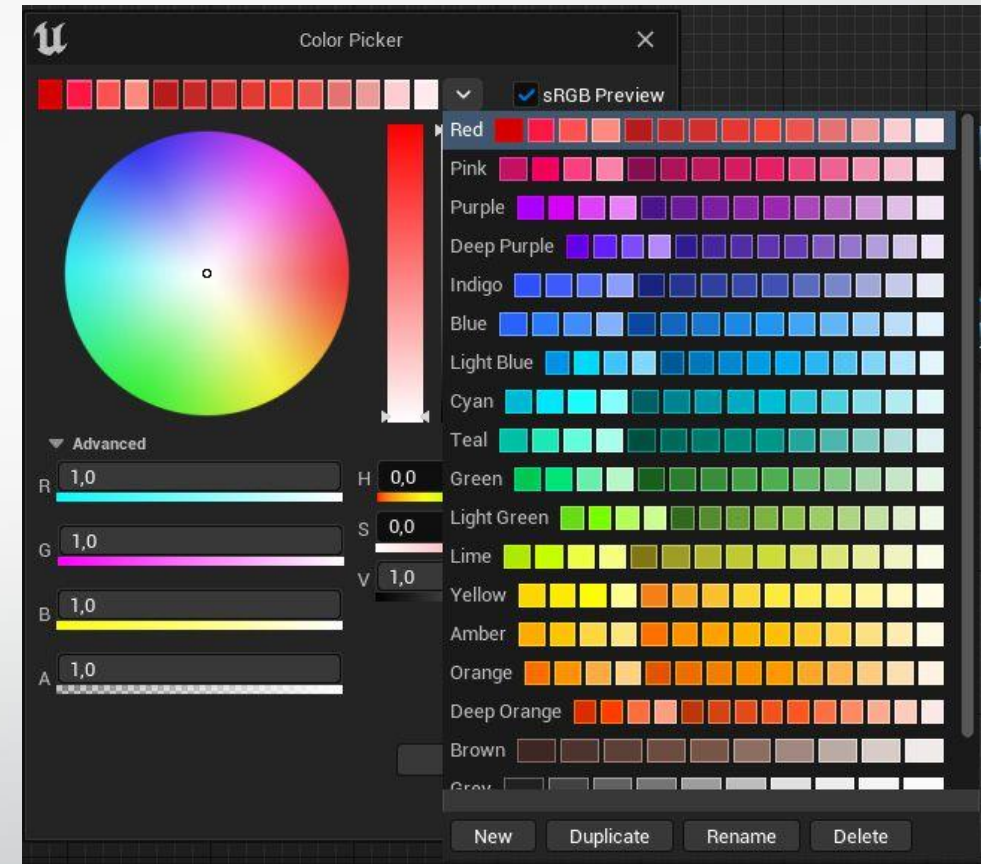
The color property allows you to specify the color of text inside an element.

You can specify any color in CSS in one of these ways:

- RGB values, Ex: `rgb(100,100,90)`
- HEX codes, ex : `#ee3e80`
- Color name, ex: `DarkBlue`

Understanding color

- Computer monitors are made up of thousands of tiny squares called pixels.
- The color of every pixel on the screen is expressed in terms of a mix **of red, green and blue** to creating a picture.
- To find the color you want you can use a color picker.
 - Photoshop or GIMP.



- RGB values: for red, green and blue are expressed as numbers between 0 and 255

`rgb(102,205,170)`

- HEX codes: hex values represent values for red, green and blue in hexadecimal code

`#66cdaa`

- Color names:: are represented by predefined names. However, they are very limited in number.

`MediumAquaMarine`

There are 147 color names supported by browsers

- HUE: is near to the colloquial idea of color. Technically speaking however, a color can also have saturation and brightness as well as HUE.



- Saturation: refers to the amount of gray in a color.

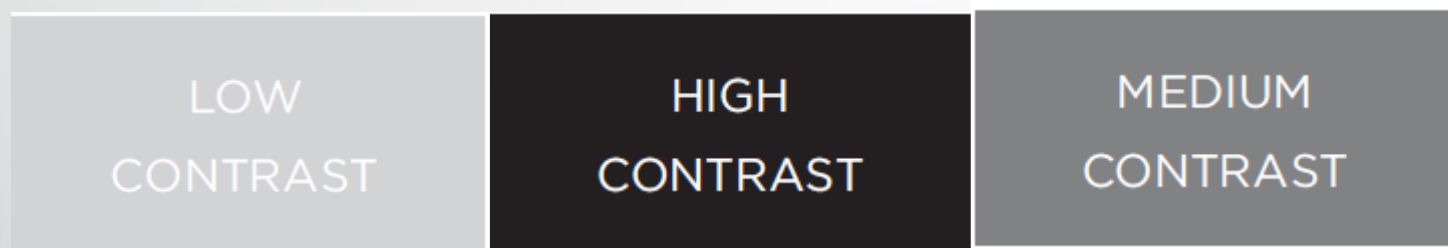


- Brightness: (or "value") refers to how much is in a color.



Contrast

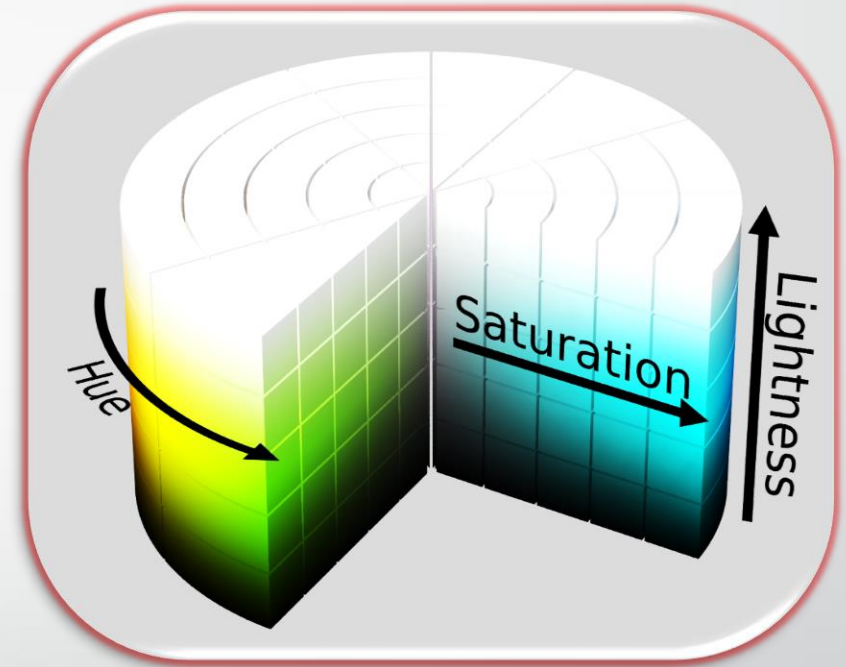
- When picking foreground and background colors, it is important to ensure there is enough contrast for the text to be legible.



- If text is reversed out (a light color on a dark background), you can increase the height between lines and the weight of the font to make it easier to read.

CSS3: HSL colors

- CSS3 introduces an entirely new and intuitive way to specify color using **hue**, **saturation**, and **lightness** values.
- The value of the property starts with the letters **HSL**, followed by individual values inside parentheses for:
 - **HUE**: this is expressed an angle(between 0 and 360 degrees).
 - **Saturation**: this is expressed as a percentage.
 - **Lightness**: this is expressed as a percentage with 0% being white, 50% being normal, and 100% being black.

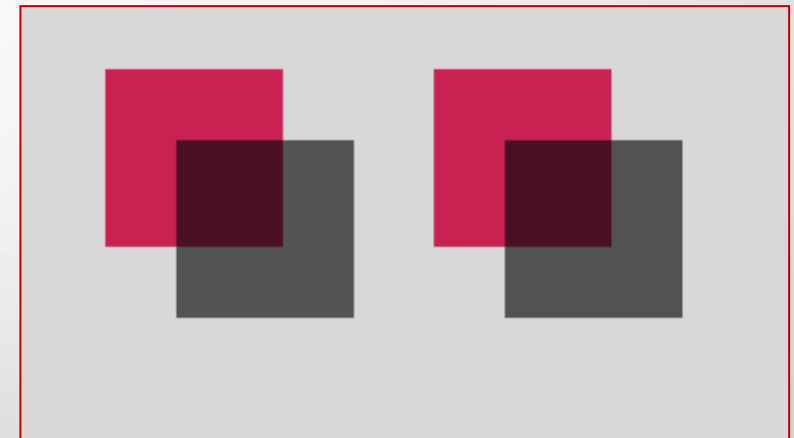


Opacity ,rgba

- CSS3 introduces the opacity property which allows you to specify the opacity of an element and any of its child element.
- You have to add fourth value to opacity, this value is known as an alpha value and is a number between **0.0** and **1.0**.
- The **rgba** value will only affect the element on which is applied (**not child elements**).

Css tip

When you learn a new property, it is a good idea to note whether it inherits.



CSS Units of Measurement

- CSS has several different units for expressing a length.
- Many CSS properties take "length" values, such as width, margin, padding, font-size, etc.

There are two types of length units: **absolute** and **relative**.

Relative units

Relative units are based on the size of something else, such as the default text size or the size of the parent element.

px pixel, considered relative in CSS2.1 because it varies with display resolution

em a unit of measurement equal to the current font size

ex x-height, approximately the height of a lowercase "x" in the font

The following units are new in CSS3. Browser support may take a while to ramp up.

rem root em, equal to the em size of the root element (**html**)

ch zero width, equal to the width of a zero (0) in the current font and size

vw viewport width unit, equal to 1/100 of the current viewport (browser window) width

vh viewport height unit, equal to 1/100 of the current viewport height

vm viewport minimum unit, equal to the value of **vw** or **vh**, whichever is smaller

Absolute units

Absolute units have predefined meanings or real-world equivalents.

px pixel, defined as an absolute measurement equal to 1/96 of an inch in CSS3

pt points (1/72 inch in CSS2.1)

pc picas (1 pica = 12 points)

mm millimeters






cm centimeters

in inches

Absolute units should be avoided for web page style sheets because they are not relevant on computer screens. However, if you are creating a style sheet to be used when the document is printed, they may be just the ticket.

Did you happen to notice that pixel (**px**) is in both of these lists? That's because the W3C hasn't quite made up their minds. Definitions aside, in practice pixels work as an absolute measurement that is not as flexible as true relative units.

CSS Units ...Browser Support

Length Unit					
em, ex, %, px, cm, mm, in, pt, pc	1.0	3.0	1.0	1.0	3.5
ch	27.0	9.0	1.0	7.0	20.0
rem	4.0	9.0	3.6	4.1	11.6
vh, vw	20.0	9.0	19.0	6.0	20.0
vmin	20.0	12.0	19.0	6.0	20.0
vmax	26.0	16.0	19.0	7.0	20.0

CSS Text

Text Color

The color property is used to set the color of the text. The color is specified by:

a color name - like "red"

a HEX value - like "#ff0000"

an RGB value - like "rgb(255,0,0)"

Text Alignment and Text Direction

text-align
text-align-last
direction

Text Alignment and Text Direction

text-align
text-align-last
direction

text-align: left

Paragraph 1. The text-align property controls the horizontal alignment of the text within an element. It does not affect the alignment of the element on the page. The resulting text behavior of the various values should be fairly intuitive.

text-align: right

Paragraph 2. The text-align property controls the horizontal alignment of the text within an element. It does not affect the alignment of the element on the page. The resulting text behavior of the various values should be fairly intuitive.

text-align: center

Paragraph 3. The text-align property controls the horizontal alignment of the text within an element. It does not affect the alignment of the element on the page. The resulting text behavior of the various values should be fairly intuitive.

text-align: justify

Paragraph 4. The text-align property controls the horizontal alignment of the text within an element. It does not affect the alignment of the element on the page. The resulting text behavior of the various values should be fairly intuitive.

text-align-last

The text-align-last property specifies how to align the last line of a text.

```
Click here to ask blackbox to help you code faster
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <link rel="stylesheet" href="t-format.css">
  <title>text align</title>
</head>
<body>
  <h1>The text-align-last Property</h1>

  <h2>text-align-last: right:</h2>
  <p class="a">Lorem ipsum dolor sit amet, consectetur adipiscing elit.
  Sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

  <h2>text-align-last: center:</h2>
  <p class="b">Lorem ipsum dolor sit amet, consectetur adipiscing elit.
  Sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

  <h2>text-align-last: justify:</h2>
  <p class="c">Lorem ipsum dolor sit amet, consectetur adipiscing elit.
  Sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.
  <p class="c">Lorem ipsum dolor sit amet consectetur adipiscing elit.
  Sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.
</body>
</html>
```

```
Click here to ask blackbox to help you code faster
1  p.a {
2    text-align-last: right;
3    color: blueviolet;
4  }
5
6  p.b {
7    color: blue;
8    text-align-last: center;
9  }
10
11 p.c {
12   text-align-last: justify;
13   color: red;
14 }
```

The text-align-last Property

text-align-last: right:

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Etiam semper diam at erat pulvinar, at pulvinar felis blandit. Vestibulum volutpat tellus diam, consequat gravida libero rhoncus ut.

text-align-last: center:

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Etiam semper diam at erat pulvinar, at pulvinar felis blandit. Vestibulum volutpat tellus diam, consequat gravida libero rhoncus ut.

text-align-last: justify:

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Etiam semper diam at erat pulvinar, at pulvinar felis blandit. Vestibulum volutpat tellus diam, consequat gravida libero rhoncus ut.

Lorem ipsum dolor sit amet consectetur adipiscing elit. Dolorum, veniam.

Text Decoration

text-decoration Values: none | underline | overline | line-through | blink

text-decoration: underline underlines the element

text-decoration: overline draws a line over the text

text-decoration: line-through draws a line through the

text text-decoration: blink makes text flash on and off

I've got laser eyes.
text-decoration: underline

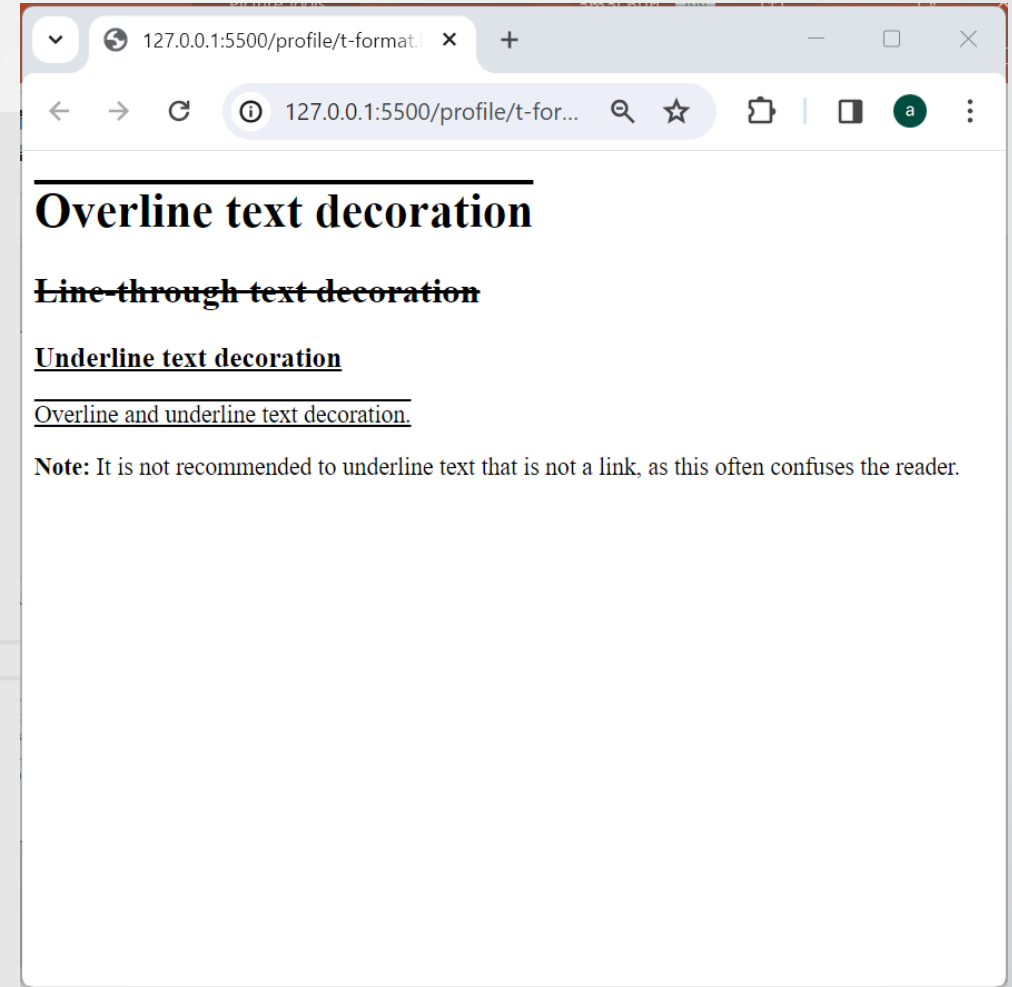
I've got laser eyes.
text-decoration: overline

~~I've got laser eyes.~~
text-decoration: line-through

```

<!DOCTYPE html>
<html>
<head>
<style>
h1 {
  text-decoration: overline;
}
h2 {
  text-decoration: line-through;
}
h3 {
  text-decoration: underline;
}
p.ex {
  text-decoration: overline underline;
}
</style>
</head>
<body>
<h1>Overline text decoration</h1>
<h2>Line-through text decoration</h2>
<h3>Underline text decoration</h3>
<p class="ex">Overline and underline text decoration.</p>
<p><strong>Note:</strong> It is not recommended to underline text that is not a link, as this often confuses
the reader.</p>
</body>
</html>

```



Changing Capitalization

text-transform Values: none | capitalize | lowercase | uppercase

text-transform: none as it is typed in the source

text-transform: capitalize capitalizes the first letter of each word

text-transform: lowercase makes all letters lowercase

text-transform: uppercase makes all letters uppercase

And I know what you're thinking.

text-transform: none (as was typed in)

And I Know What You'Re Thinking.

text-transform: capitalize

and i know what you're thinking.

text-transform: lowercase

AND I KNOW WHAT YOU'RE THINKING.

text-transform: uppercase

Text Shadow

`text-shadow: H-shadow | V-shadow | Blur | Color;`



web design

`text-shadow: 10px 5px 6px red ;`



web design

`text-shadow: -10px -5px 8px green`



web design

`text-shadow: 0 0 50px green`

Box shadows

- The ***box-shadow*** property allows you to add a drop shadow around a box.
- **Horizontal offset:** negative values position the shadow to the left of the box.
- **Vertical offset:** negative values position the shadow to the top of the box.
- **Blur distance:** if omitted, the shadow is a solid line like a border
- **Spread of shadow:** if used, a positive value will cause the shadow to expand in all direction and a negative value will make it contract.

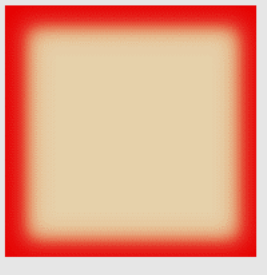
box-shadow: H-shadow | V-shadow | Blur | Spread | Color | Inset



box-shadow: 10px 20px 10px 8px green;



box-shadow: -10px -20px 10px -8px #002980ab;



box-shadow: 1px 1px 10px 5px red inset



```
<style type="text/css">
  p {
    width: 100px;
    height: 100px;
    background-color: #e1ddda;
    margin: 20px;
    display: inline-block;}
  p.one {
    box-shadow: -5px -5px #777777;}
  p.two {
    box-shadow: 5px 5px 5px #777777;}
  p.three {
    box-shadow: 5px 5px 5px 5px #777777;}
  p.four {
    box-shadow: 0 0 10px #777777;}
  p.five {
    box-shadow: inset 0 0 10px #777777;}
</style>
</head>
<body>
  <p class="one"></p>
  <p class="two"></p>
  <p class="three"></p><br />
  <p class="four"></p>
  <p class="five"></p>
</body>
```

Font shorthand

The font property is a shorthand property for:

`font-style` | `font-variant` | `font-weight` | `font-size/line-height` | `font-family`

Property	Description
<u>font</u>	Sets all the font properties in one declaration
<u>font-family</u>	Specifies the font family for text
<u>font-size</u>	Specifies the font size of text
<u>font-style</u>	Specifies the font style for text
<u>font-variant</u>	Specifies whether or not a text should be displayed in a small-caps font
<u>font-weight</u>	Specifies the weight of a font

```

<!DOCTYPE html>
<html>
<head>
<style>
p.a {
  font: 20px Arial, sans-serif;
}

p.b {
  font: italic small-caps bold 12px/30px Georgia, serif;
}
</style>
</head>
<body>

<h1>The font Property</h1>

<p class="a">This is a paragraph. The font size is set
to 20 pixels, and the font family is Arial.</p>

<p class="b">This is a paragraph. The font is set to
italic, small-caps and bold, the font size is set to 12
pixels, the line height is set to 30 pixels, and the
font family is Georgia.</p>

</body>
</html>

```

The font Property

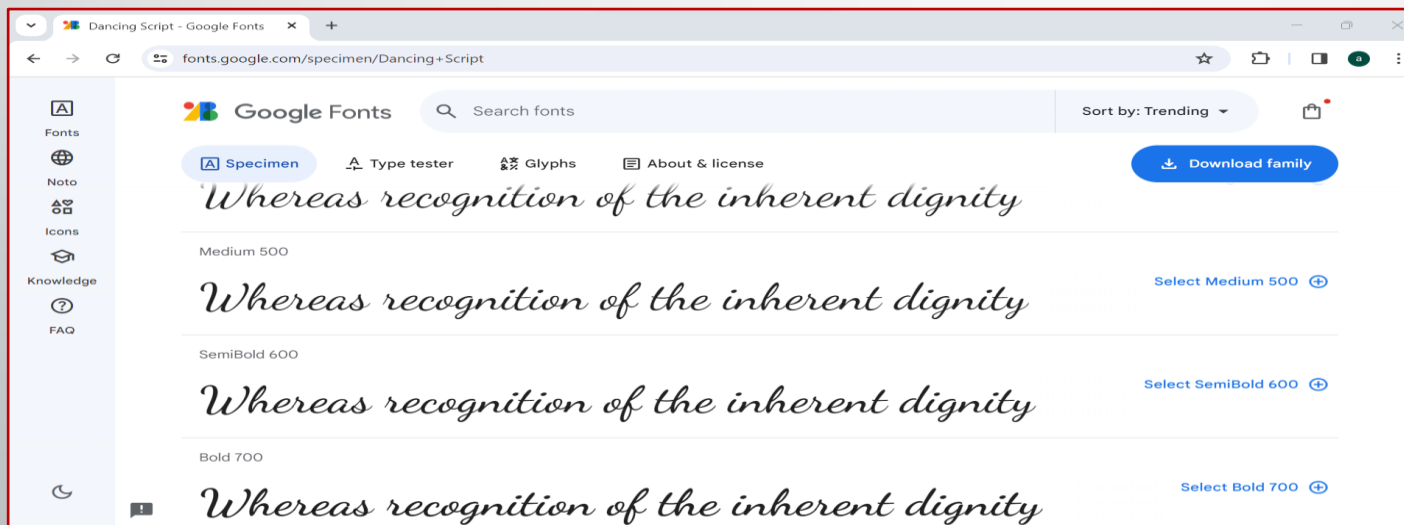
This is a paragraph. The font size is set to 20 pixels, and the font family is Arial.

THIS IS A PARAGRAPH. THE FONT IS SET TO ITALIC, SMALL-CAPS AND BOLD, THE FONT SIZE IS SET TO 12 PIXELS, THE LINE HEIGHT IS SET TO 30 PIXELS, AND THE FONT FAMILY IS GEORGIA.

Note: The font-size and font-family values are required. If one of the other values is missing, their default value are used

Add a font from Google Fonts

1. Visit the Google Fonts website at <https://fonts.google.com/>.
2. Browse the available fonts and choose the one you want to use.
3. In the selection drawer at the bottom of the screen, you will see the code to add to your website. You can either copy the HTML link and paste it into the head of your HTML document or download the font files to your desktop.



☐ <link> ☒ @import

```
<style>
@import url('https://fonts.googleapis.com/css2?family=Dancing+Script:wght@500&family=Yellowtail&display=swap');
</style>
```

CSS rules to specify families

```
font-family: 'Dancing Script', cursive;
font-family: 'Yellowtail', cursive;
```

```
@import url('https://fonts.googleapis.com/css2?family=Dancing+Script:wght@500&family=Yellowtail&display=swap');
*{
  font-family: 'Dancing Script', cursive;
font-family: 'Yellowtail', cursive;
}
p{
  text-align: justify;
}
```

search

Lorem ipsum dolor sit amet consectetur adipisicing elit. Odio, consequuntur officia hic aliquid quas nihil quis architecto! Voluptatibus quo odit minus animi pariatur ut voluptate facere impedit cumque, labore fuga.

Lorem ipsum dolor sit amet consectetur adipisicing elit. Odio, consequuntur officia hic aliquid quas nihil quis architecto! Voluptatibus quo odit minus animi pariatur ut voluptate facere impedit cumque, labore fuga.



Box dimensions

width, height

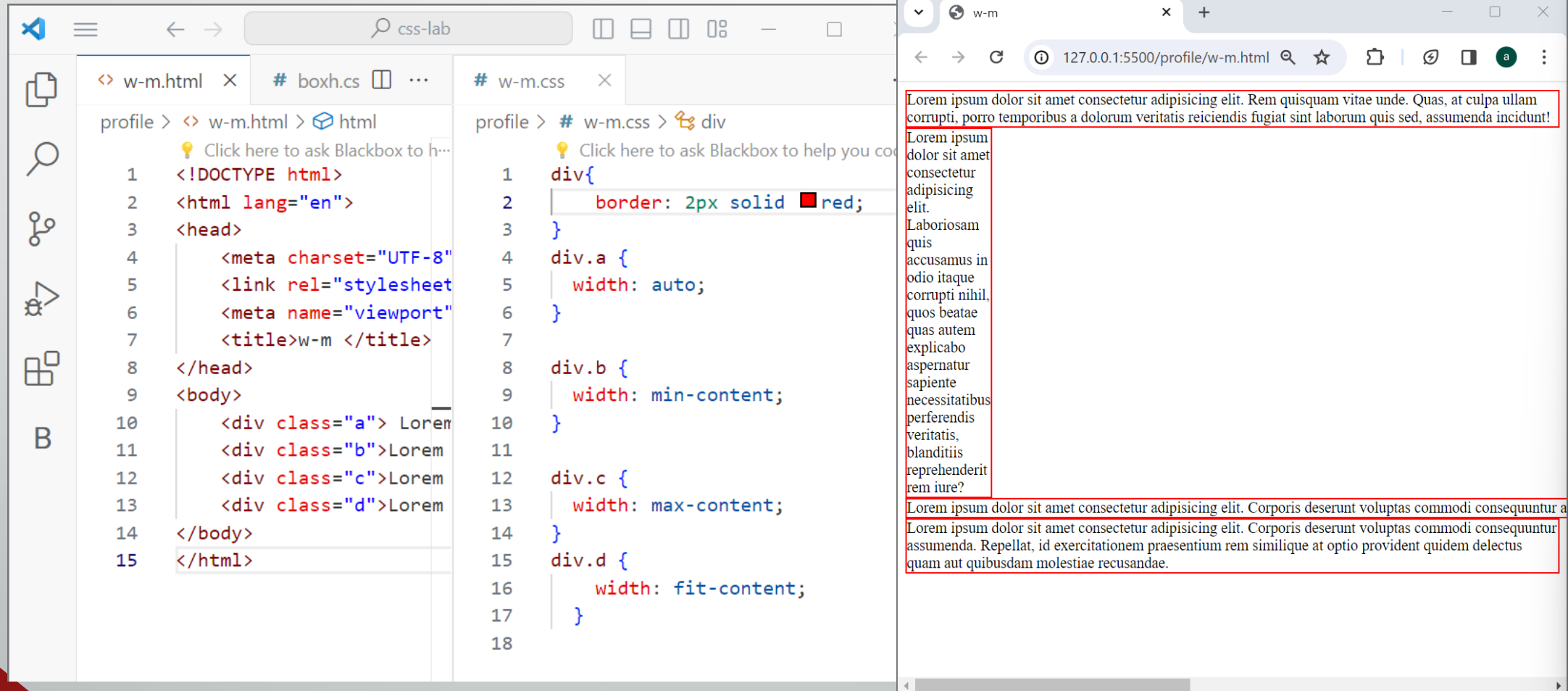
- The default a box is sized just big enough to hold its contents.
- The most popular ways to specify the size of a box are to use **pixels**, **percentages** or **ems**.
- When you use **percentages**, the size of the box is relative to the size of the browser windows or if the box is encased within another box.
- When you use **ems**, the size of the box is based on the size of text within it.

Width

width: auto;
width: max-content;
width: min-content;
width: fit-content;

highth

highth: auto;
width: max-content;
width: min-content;
width: fit-content;



Limiting width and height

- **Min-width** property specifies the smallest size a box can be displayed.
- **Max-width** property indicates the maximum width a box can stretch to when the browser window is wide.
- **Min-height and max-height** : in the same way that you might want to limit the width of a box on a page, you may also want to limit the height of it

```
div{
  border: 2px solid #3d814d;
  font-size: 20px;
  font-family: cursive;
}
div.a {
  max-width: 200px;
  min-width: 200px;
}

div.b {
  min-width: 200px;
  max-width: 300px;
}

div.c {
  max-width: 100px;
}

div.d {
  min-width: 300px;
  max-width: 400px;
}
```

Dimensions: Responsive ▾ 471 x 997 50% ▾ No t

(max-width:200pxm
||min-width: 200px)
(min-width: 200px || max-
width: 300px;)
max-
width:
100px
min-width: 300px || max-width: 400px

```
}  
div.a {  
  max-width: 200px;  
  min-width: 200px;  
  height: auto;  
}  
  
div.b {  
  min-width: 200px;  
  max-width: 300px;  
  height: fit-content;  
}  
  
div.c {  
  max-width: 100px;  
  height: max-content;  
}  
div.d {  
  height: min-content;  
  min-width: 300px;  
  max-width: 400px;  
}
```

(max-width:200pxm
||min-width: 200p||
height: auto)

(min-width: 200px || max-
width: 300px ||height: fit-
content)

max-
width:
100px
||height:
max-
content

min-width: 300px || max-width: 400px ||
height: min-content

```

<head>
  <title>Min Height Max Height</title>
  <style type="text/css">
    body {
      font-family: Arial, Verdana, sans-serif;
      color: ■ #111111;
    }
    h2, p {
      width: 400px;
      font-size: 90%;
      line-height: 1.2em;
    }
    h2 {
      color: ■ #0088dd;
      border-bottom: 1px solid ■ #0088dd;
    }
    p {
      min-height: 10px;
      max-height: 30px;
    }
  </style>
</head>
<body>
  <h2>Fender Mustang</h2>
  <p>The Fender Mustang was introduced in 1964 as the basis of a major redesign of Fender's student models then
  <h2>Fender Stratocaster</h2>
  <p>The Fender Stratocaster or "Strat" is one of the most popular electric guitars of all time, and its design
  <h2>Gibson Les Paul</h2>
  <p>The Gibson Les Paul is a solid body electric guitar that was first sold in 1952. The Les Paul was designed
</body>

```

Fender Mustang

The Fender Mustang was introduced in 1964 as the basis of a major redesign of Fender's student models then consisting of the Musicmaster and Duo-Sonic. It was originally popular in sixties surf music and attained cult status in the 1990s largely as a result of its use by a number of alternative rock bands.

The Fender Stratocaster or "Strat" is one of the most popular electric guitars of all time, and its design has been copied by many guitar makers. It was designed by Leo Fender, George Fullerton and Freddie Tavares in 1954.

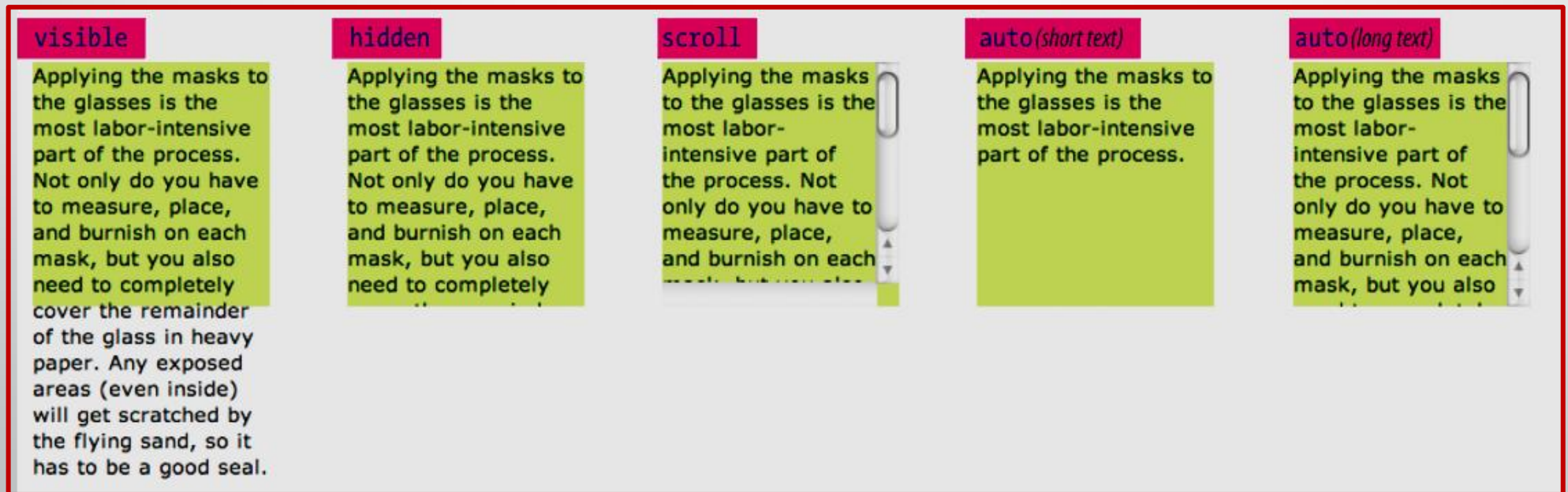
The Gibson Les Paul is a solid body electric guitar that was first sold in 1952. The Les Paul was designed by Ted McCarty in collaboration with popular guitarist Les Paul, whom Gibson enlisted to endorse the new model. It is one of the most well-known electric guitar types in the world.

Overflowing content

The **overflow** property tells the browser what to do if the content contained within a box is larger than the box itself. It can have one of two values:

- **Visible**: The default value is visible, which allows the content to hang out over the element box so that it all can be seen.
- **hidden**: When overflow is set to hidden, the content that does not fit gets clipped off and does not appear beyond the edges of the element's content area.

- **scroll** :When scroll is specified, scrollbars are added to the element box to let users scroll through the content.(the scrollbars will always be there, even if the content fits in the specified height just fine).
- **auto** :The auto value allows the browser to decide how to handle overflow. In most cases, scrollbars are added only when the content doesn't fit and they are needed



Border width

- The border-width property is used to control the width of a border. The value of this property can either be given in pixels or using one of the following value:
 - Thin , medium or thick.
- You can control the individual size of border using four separate properties:
 - Border-top-width.
 - Broder-right-width.
 - Border-bottom-width.
 - Border-left-width.


```
<!DOCTYPE html>
<html>
  <head>
    <title>Border Width</title>
    <style type="text/css">
      body {
        font-family: Arial, Verdana, sans-serif;
        color: ■ #111111;
      }
      p {
        width: 200px;
        border-style: solid;
      }
      p.one {
        border-width: 2px;
      }
      p.two {
        border-width: thick;
      }
      p.three {
        border-width: 1px 4px 12px 4px;
      }
    </style>
  </head>
  <body>
    <p class="one">Hohner's "Clavinet" is essentially an electric clavichord.</p>
    <p class="two">Hohner's "Clavinet" is essentially an electric clavichord.</p>
    <p class="three">Hohner's "Clavinet" is essentially an electric clavichord.</p>
  </body>
</html>
```

Hohner's "Clavinet" is essentially an electric clavichord.

Hohner's "Clavinet" is essentially an electric clavichord.

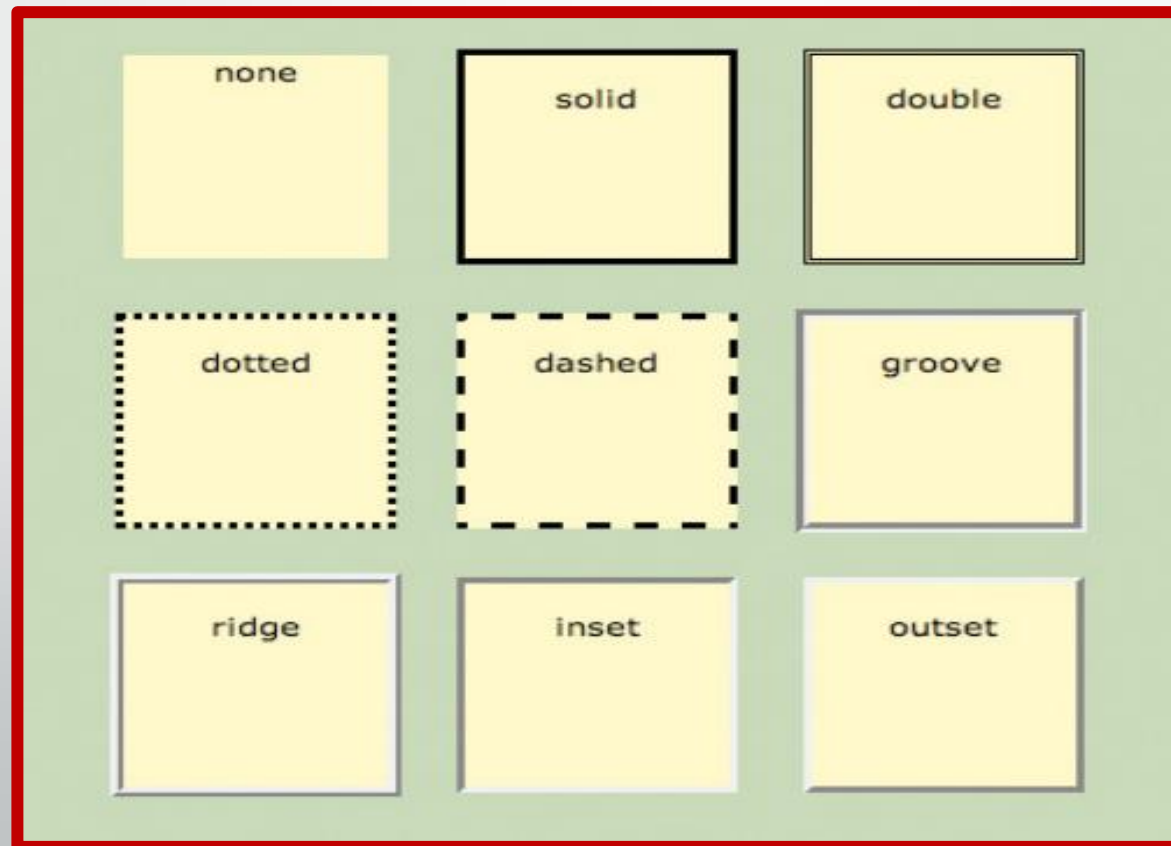
Hohner's "Clavinet" is essentially an electric clavichord.

Border style and color

- You can control the style of a border using the border-style property.

Values:

none | dotted | dashed | solid | double | groove | ridge | inset | outset | inherit



Border style and color

- Border color: you can specify the color of a border using Border-color property and also it is possible to individually control the colors of the borders on different sides of a box using:

Border-top-color. Broder-right-color.
Border-bottom-color. Border-left-color.

The ARP Odyssey was
introduced in 1972.

The ARP Odyssey was
introduced in 1972.

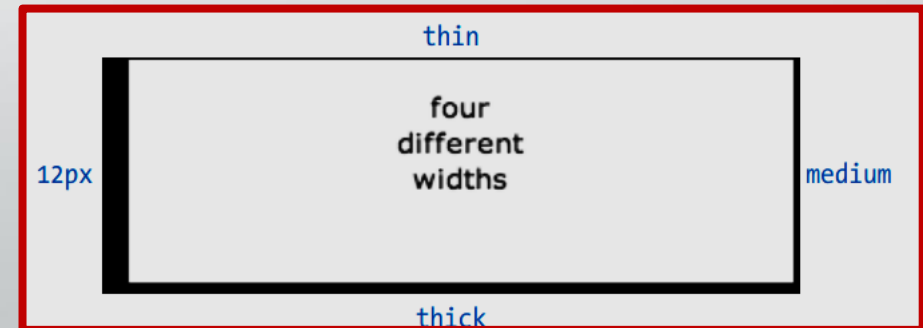
Border width (thickness)

- border-width Values:

length units | thin | medium | thick | inherit

```
div
{
border-top-width: thin;
border-right-width: medium;
border-bottom-width: thick;
border-left-width: 12px;
border-style: solid; width:
300px; height: 100px;
}
```

```
div
{
border-width: thin medium thick 12px;
border-style: solid; width: 300px;
height: 100px;
}
```



CSS3:rounded corners

- Border-radius property help you to create rounded corners on any box. The value indicates the size of the radius in pixels.
- You can specify individual values for each corner of a box using:

Border-top-right-radius | Border-bottom-right-radius

| Border-bottom-left-radius | Border-top-left-radius

Or : border-radius: 5px,10px, 5px, 10px;

Short hand

```
p { width: 200px; height: 100px; background: darkorange; }
```



border-top-right-radius: 50 px;



border-top-left-radius: 1 em;
border-top-right-radius: 2 em;
border-bottom-right-radius: 1 em;
border-bottom-left-radius: 2 em;

~or~

border-radius: 1 em 2em;}



border-radius: 5px 20px; 40px 60px;



border-radius: 1em;



border-radius: 50 px;

CSS3:rounded corners-Browser support

- Webkit browsers

(Safari < 5) Chrome<10.5 Android < 2.2 ios <4

webkit-border-top-left-radius

-webkit-border-top-right-radius

-webkit-border-bottom-left-radius

-webkit-border-bottom-right-radius

-webkit-border-radius

- Webkit browsers

(Firefox <4)

-moz-border-radius-topleft

-moz-border-radius-topright

-moz-border-radius-bottomleft

-moz-border-radius-bottomright

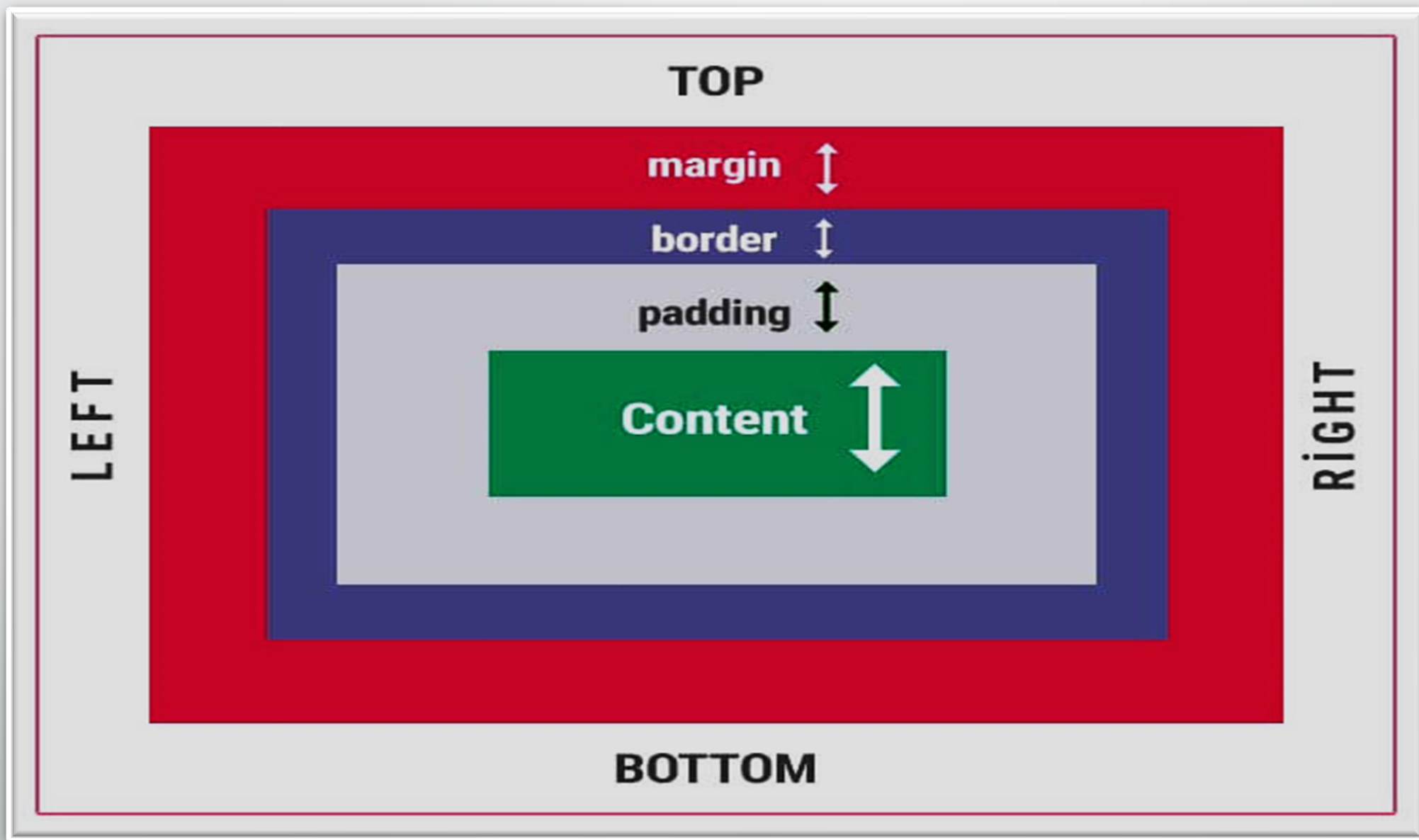
-moz-border-radius

```
<!DOCTYPE html>
<html>
  <head>
    <title>Border Radius</title>
    <style type="text/css">
      p {
        border: 5px solid ■ #ee3e80;
        padding: 20px;
        width: 275px;
        border-radius: 10px;
        -moz-border-radius: 10px;
        -webkit-border-radius: 10px;}
    </style>
  </head>
  <body>
    <p>Pet Sounds featured a number of unconventional instruments such as bicycle bells,
    buzzing organs, harpsichords, flutes, Electro-Theremin, dog whistles, trains,
    Hawaiian-sounding string instruments, Coca-Cola cans and barking dogs.</p>
  </body>
</html>
```

Pet Sounds featured a number of unconventional instruments such as bicycle bells, buzzing organs, harpsichords, flutes, Electro-Theremin, dog whistles, trains, Hawaiian-sounding string instruments, Coca-Cola cans and barking dogs.

Border, margin and padding

- **Border:** every box has a border(even if it is not visible or is specified to be 0 pixels wide).the border separates the edge of one box from another.
- **Margin:** sit outside the edge of the border. You can set the width of a margin to create a gap between the borders of two adjacent boxes.
- **Padding:** is the space between the border of a box and any content contained within it.



WITH MARGIN & PADDING

Moog

Moog synthesisers were created by Dr. Robert Moog under the company name Moog Music. Popular models include the Moog Modular, Minimoog, Micromoog, Moog Rogue, and Moog Source.

ARP

ARP Instruments Inc. was set up by Alan Peralman, and was the main competitor for Moog during the 1970's. Popular models include the Arp 2600 and the ARP Odyssey.

Sequential Circuits

Sequential Circuits Inc was founded by Dave Smith, and the company was pivotal in the creation of MIDI. Famous models include the Prophet 5, Prophet 600, and Pro-One.

WITHOUT MARGIN & PADDING

Moog

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padding

- The padding property allows you to specify how much space should appear between the content of an element and its border.
- You can specify different values for each side of a box using:
 - Padding-top
 - Padding-right
 - Padding-bottom
 - Padding-left

margin

- The margin property control the gap between boxes. You can specify values for each side of a box using:
 - Margin-top
 - Margin-right
 - Margin-bottom
 - Margin-left
- If you want to center a box on the page (or center it inside the element that it sit in) you can set the **left-margin** and **right-margin** to **auto**

NOTE

Adding a margin to the body element adds space between the page content and the edges of the browser window

```

A p#A {
  margin: 4em;
  border: 1px solid red;
  background: #FCF2BE;
}
B p#B {
  margin-top: 2em;
  margin-right: 250px;
  margin-bottom: 1em;
  margin-left: 4em;
  border: 1px solid red;
  background: #FCF2BE;
}
C body {
  margin: 0 15%;
  border: 1px solid red;
  background-color: #;
}

```

A

Applying the masks to the glasses is the most labor-intensive part of the process. Not only do you have to measure, place, and burnish on each mask, but you also need to completely cover the remainder of the glass in heavy paper. Any exposed areas (even inside) will get scratched by the flying sand, so it has to be a good seal.

margin: 4em;

B

After the blasting, the protective paper and the resist masks needs to be removed from the glasses. A cycle in the dishwasher finishes the job.

margin-top: 2em;
margin-right: 250px;
margin-bottom: 1em;
margin-left: 4em;

C



display

- The display property allows you to turn an inline element into a block-level element or vice versa, and can also be used to hide an element from the page.
- The values this property can take are:
 - Inline
 - Block
 - Inline-block
 - none

Hiding boxes

- The visibility property allows you to hide boxes from user but it leaves a space where the element would have been.
- This property can take two values:
 - Hidden
 - visible

```
button{
    height: 80px;
    width: 300px;
    color: antiquewhite;
    font-size: 20px;
    border-radius: 50px 50px;
    display: inline-block;
    margin: 5px;
}
button.a{
    background-color: green;
}
button.b{
    background-color: rgb(196, 17, 115);
}
button.c{
    background-color: rgb(56, 17, 196);
}
button.a:hover , button.b:hover{
    background-image: linear-gradient(to right, red, gold);
}
button.a:active{
    visibility: hidden;
}
button.b:active{
    display: none;
}
button.c:active{
    opacity: 0;
}
```

CSS Pseudo-classes

A pseudo-class is used to define a special state of an element. For example, it can be used to:

- Style an element when a user mouses over it
- Style visited and unvisited links differently
- Style an element when it gets focus

```
selector:pseudo-class {  
  property: value;  
}
```



```

<link rel="stylesheet" href="style.css">
</head>
<body>

  <nav>

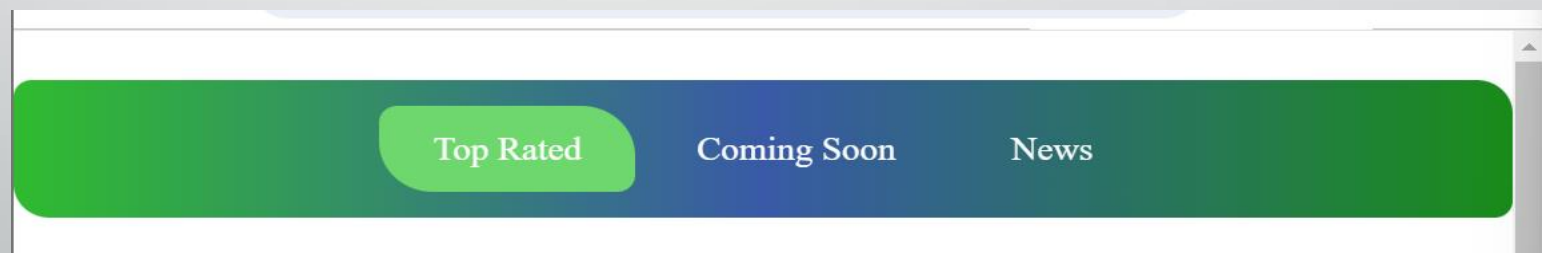
    <a href="ddd">Top Rated</a>
    <a href="ddd">Coming Soon</a>
    <a href="ddd">News</a>
  </nav>
  <h1 style="text-align: center">Ma
  <p>Lorem ipsum dolor sit amet cons
  <p>Lorem ipsum dolor sit amet cons
  <p>Lorem ipsum dolor sit amet cons
  <p>Lorem ipsum dolor sit amet cons
  <p>Lorem ipsum dolor sit amet cons
  <p>Lorem ipsum dolor sit amet cons

```

```

7  nav {
8    background-image: linear-gradient(to right, #19b419, #24489d, green);
9    opacity: 0.9;
10   padding: 30px 0;
11   border-radius: 10px 20px;
12   margin: 30px 0;
13   text-align: center;
14 }
15 a {
16   color: white;
17   padding: 15px 30px;
18   text-decoration: none;
19   font-size: 20px;
20 }
21 a:hover{
22   background-color: #5ed35e;
23   border-radius: 10px 30px;
24 }

```



CSS Pseudo-elements

A CSS pseudo-element is used to style specified parts of an element. For example, it can be used to:

- Style the first letter, or line, of an element
- Insert **content before**, or **after**, the content of an element

```
selector::pseudo-element {  
  property: value;  
}
```

```
p::first-letter{
  font-weight: bold;
font-size: 30px;
color: ■ red;
}
p::first-line {
  color: ■ #314ba8;
  font-variant: small-caps;
}
```

logo

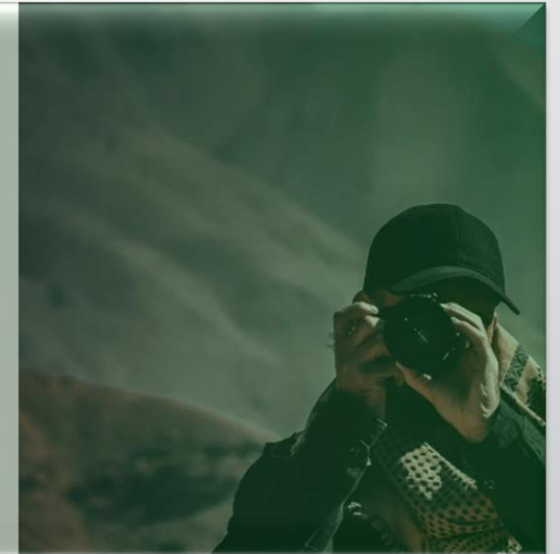
Top Rated

Coming Soon

News

LOREM IPSUM DOLOR SIT AMET CONSECTETUR ADIPISICING ELIT. ODIO, CONSEQUUNTUR OFFICIA HIC ALIQUID QUAS NIHIL quis architecto! Voluptatibus quo odit minus animi pariatur ut voluptate facere impedit cumque, labore fuga.

LOREM IPSUM DOLOR SIT AMET CONSECTETUR ADIPISICING ELIT. ODIO, CONSEQUUNTUR OFFICIA HIC ALIQUID QUAS NIHIL quis architecto! Voluptatibus quo odit minus animi pariatur ut voluptate facere impedit cumque, labore fuga.



```
<head>
  <style>
    body {
      color: ■ green;
      font-size: large;
      text-align: center;
    }
    p::before {
      content: '""';
      color: ■ red;
      font-size: 30px;
    }
  </style>
</head>
<body>
  <h2>::before element</h2>
  <p>
    This is a paragraph to which we added red color quotationmarks using ::before element.
  </p>
</body>
</html>
```

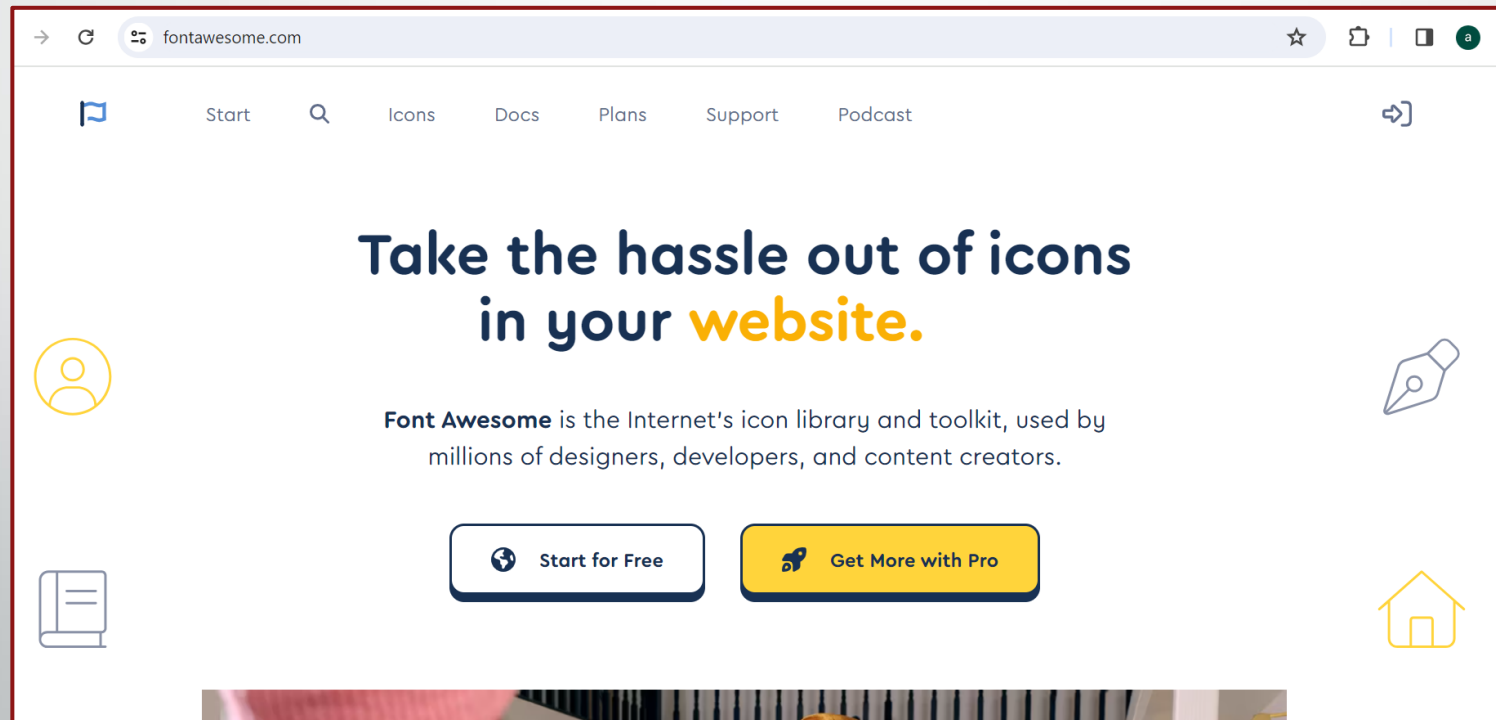
::before element

" This is a paragraph to which we added red color quotation marks using ::before element.

Font Awesome Icons

To use the Font Awesome icons, go to fontawesome.com, sign in, and get a code to add in the <head> section of your HTML page:

```
<script src="https://kit.fontawesome.com/yourcode.js" crossorigin="anonymous"></script>
```



```

<!DOCTYPE html>
<html>
<head>
<title>Font Awesome Icons</title>
<meta name="viewport" content="width=device-width, initial-scale=1">
<script src="https://kit.fontawesome.com/6d8cad88e7.js" crossorigin="anonymous"></script>

</head>
<body>
  <span class="fa-stack fa-lg">
    <i class="fas fa-circle fa-stack-2x"></i>
    <i class="fab fa-twitter fa-stack-1x fa-inverse"></i>
  </span>

  <i class="fas fa-facebook"></i>
  <i class="fas fa-heart"></i>
  <i class="fas fa-car"></i>
  <i class="fas fa-file"></i>
  <i class="fas fa-bars"></i>

  <i class="fas fa-cloud" style="font-size:24px;"></i>
  <i class="fas fa-cloud" style="font-size:36px;"></i>
  <i class="fas fa-cloud" style="font-size:48px;color:red;"></i>
  <i class="fas fa-cloud" style="font-size:60px;color:lightblue;"></i>
</body>
</html>

```





web design



127.0.0.1:5500/index.html#



Web Design
Class



home



Students



weekly
schedule



Results



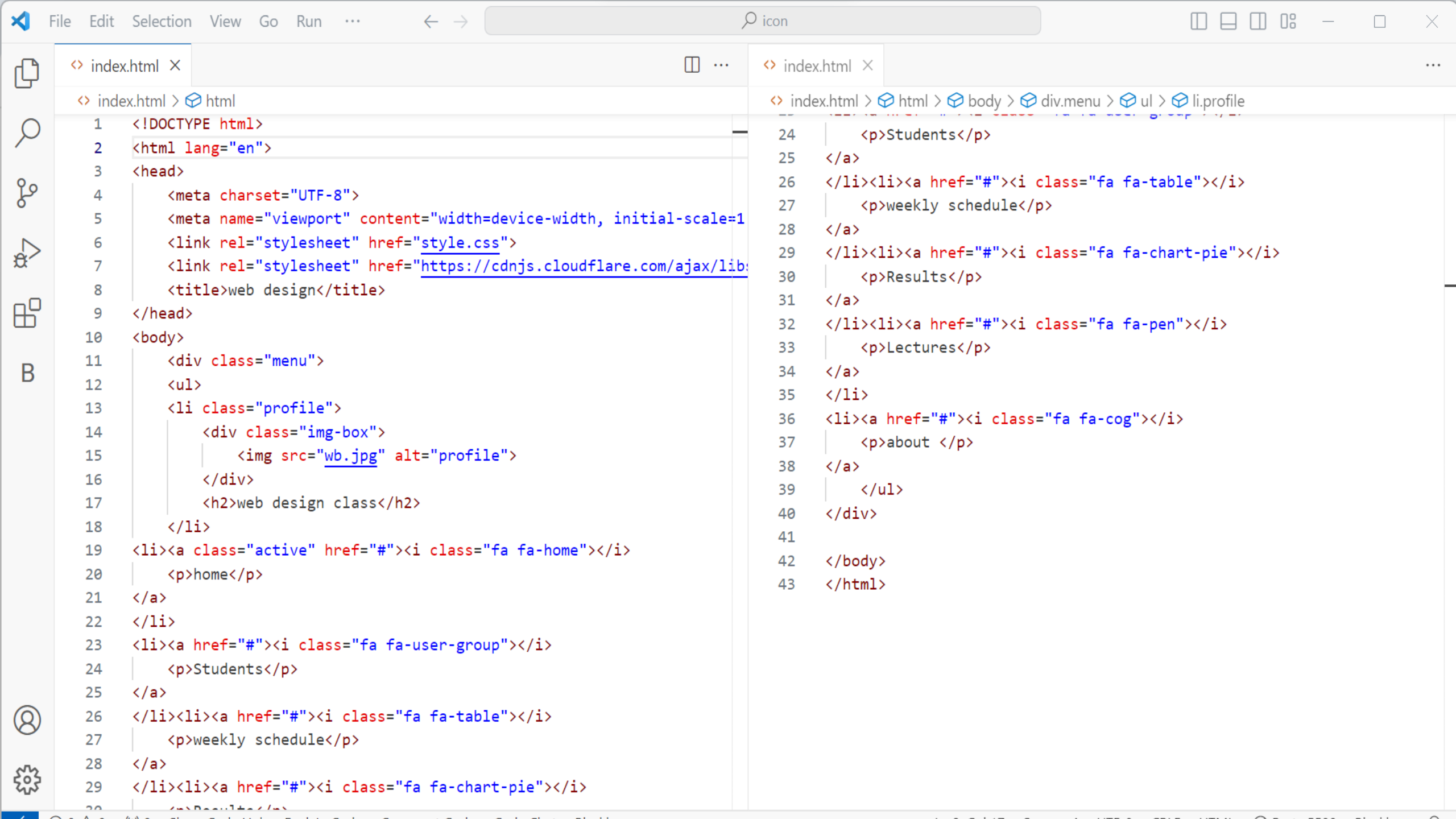
Lectures

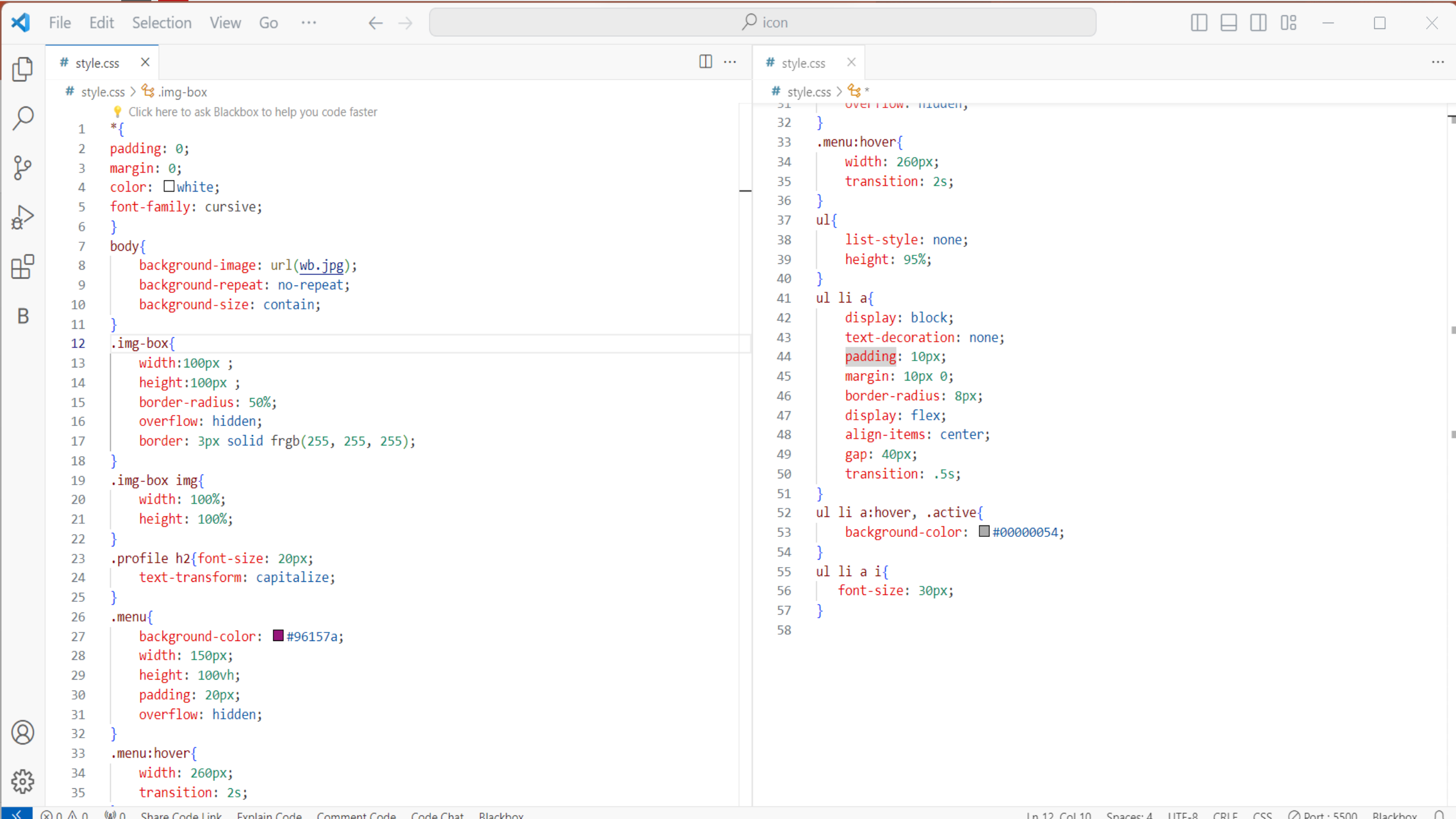


about

Website Design







Images

- The **size** of the images could control it by ***width and height properties*** in CSS.
- Also the **aligning** images in CSS by using ***float property*** to move the element to the left or right of its containing block.
- **To centering image** should be turned the ***img*** into block-level element using **display property** with a value of block. And gives auto value to left and right margin of the image

```

<style type="text/css">
  body {
    font-family: Georgia, "Times New Roman", serif;
    color: #665544;
  }
  img.align-center {
    display: block;
    margin: auto auto;
  }
  img.align-left {
    float: left;
    margin-right: 10px;
  }

```

```

img.medium {
  width: 250px;
  height: 250px;
}

```

```

</style>

```

```

</head>

```

```

<body>

```

```

<p>

```

```

  <b><i>Magnolia</i></b> is a large genus that contains over 200 flowering plant species.

```

```

  It is named after French botanist Pierre Magnol and, having evolved before bees appeared,
  the flowers were developed to encourage pollination by beetle.</p>

```

```

<p>

```

```

  <b><i>Magnolia</i></b> is a large genus that contains over 200 flowering plant species.

```

```

  It is named after French botanist Pierre Magnol and, having evolved before bees appeared,
  the flowers were developed to encourage pollination by beetle.</p>

```

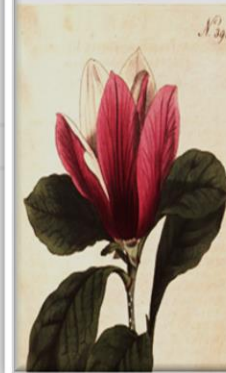
```

</body>

```



Magnolia is a large genus that contains over 200 flowering plant species. It is named after French botanist Pierre Magnol and, having evolved before bees appeared, the flowers were developed to encourage pollination by beetle.



Magnolia is a large genus that contains over 200 flowering plant species. It is named after French botanist Pierre Magnol and, having evolved before bees appeared, the flowers were developed to encourage pollination by beetle.

CSS background

CSS background properties:

background-color | background-image | background-repeat |

background-attachment | background-position

CSS background-color

- With CSS, a color is most often specified by:
- a valid color name - like "red"
- a HEX value - like "#ff0000"
- an RGB value - like "rgb(255,0,0)"

```
div.gallery {  
  margin: 5px;  
  border: 1px solid #ccc;  
  float: left;  
  width: 180px;  
  background-color: #ff0000;  
}
```



Add a description of
the image here



Add a description of
the image here



Add a description of
the image here

CSS background-image

- The background-image property specifies an image to use as the background of an element.
- By default, the image is repeated so it covers the entire element.




```

<title>bg</title>
<style>
  p{color: □aliceblue;}
  body{
    background-image: url(bg3.jpeg);
  }
</style>
</head>
<body>
  <p>Lorem ipsum, dolor sit amet consectetur adipisicing
  <p>Lorem ipsum,
  <p>Lorem ipsum, Lorem ipsum, dolor sit amet consectetur adipisicing elit. Inventore libero velit iure est excepturi dolor voluptatem, ullam error t
  saepe a ipsam accusamus optio nihil nemo architecto. Aliquid ad dolorem iste vero nihil dicta impedit adipisci fuga suscipit offi
  Lorem ipsum, dolor sit amet consectetur adipisicing elit. Inventore libero velit iure est excepturi dolor voluptatem, ullam error t
  saepe a ipsam accusamus optio nihil nemo architecto. Aliquid ad dolorem iste vero nihil dicta impedit adipisci fuga suscipit offi
  Lorem ipsum, dolor sit amet consectetur adipisicing elit. Inventore libero velit iure est excepturi dolor voluptatem, ullam error t
  saepe a ipsam accusamus optio nihil nemo architecto. Aliquid ad dolorem iste vero nihil dicta impedit adipisci fuga suscipit offi
</body>
</html>

```



Tip: By default browser repeats or tiles the background image both horizontally and vertically to fill the entire area of an element. You can control this with background- property.



CSS background-repeat

- By default, the background-image property repeats an image both horizontally and vertically.
- Some images should be repeated only horizontally or vertically, or they will look strange, like this:

CSS background-repeat-x

```
<style>
  p{color: □aliceblue;}
  body{
    background-image: url(bg3.jpeg);
    background-repeat: repeat-x;
  }
</style>
```

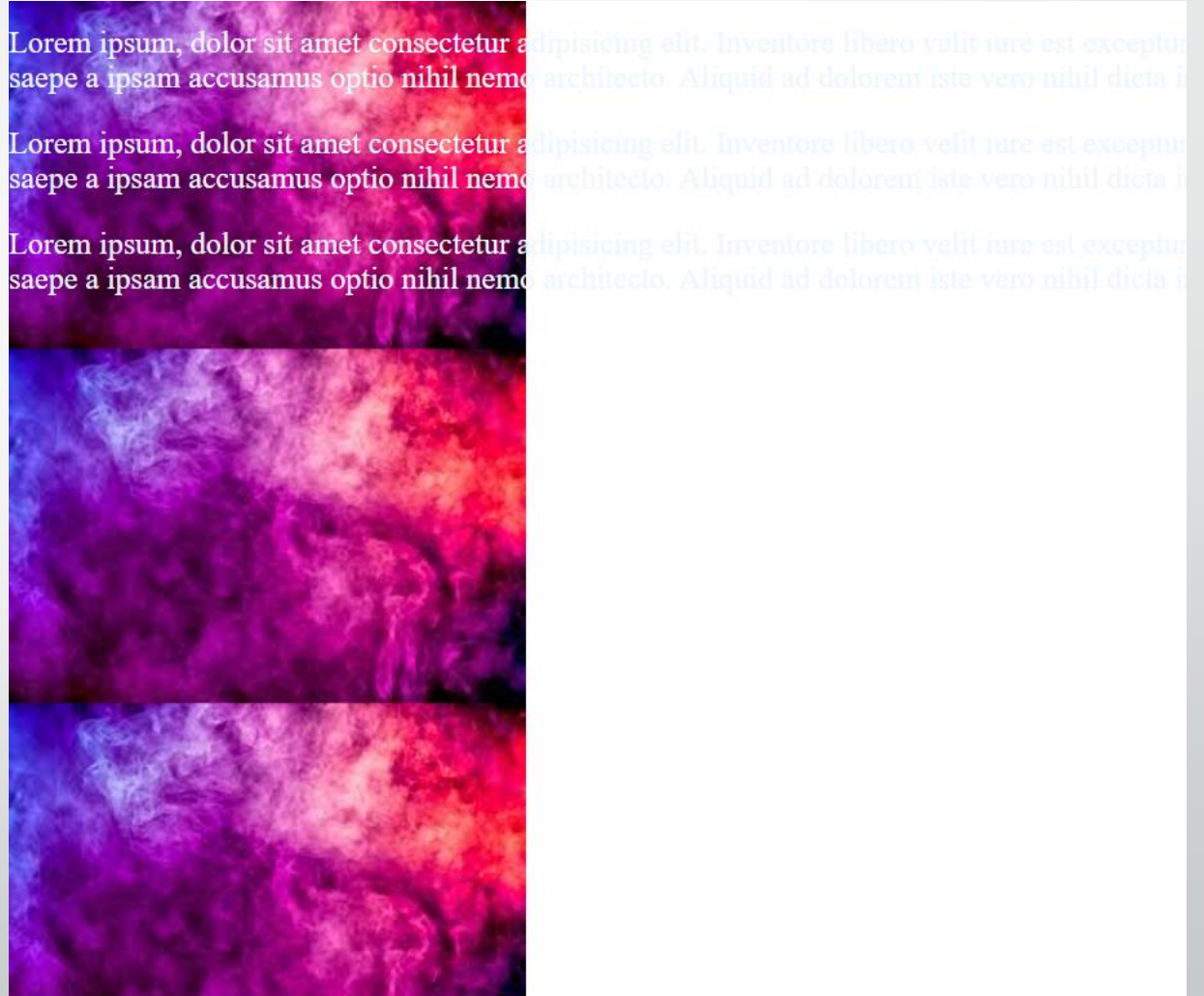
Lorem ipsum, dolor sit amet consectetur adipisicing elit. Inventore libero velit iure est excepturi dolor voluptatem, ullam error temp saepe a ipsam accusamus optio nihil nemo architecto. Aliquid ad dolorem iste vero nihil dicta impedit adipisci fuga suscipit officia,

Lorem ipsum, dolor sit amet consectetur adipisicing elit. Inventore libero velit iure est excepturi dolor voluptatem, ullam error temp saepe a ipsam accusamus optio nihil nemo architecto. Aliquid ad dolorem iste vero nihil dicta impedit adipisci fuga suscipit officia,

Lorem ipsum, dolor sit amet consectetur adipisicing elit. Inventore libero velit iure est excepturi dolor voluptatem, ullam error temp saepe a ipsam accusamus optio nihil nemo architecto. Aliquid ad dolorem iste vero nihil dicta impedit adipisci fuga suscipit officia,

CSS background-repeat-y

```
p{color: #aliceblue;}  
body{  
  background-image: url(bg3.jpeg);  
  background-repeat: repeat-y;  
}  
</style>  
</body>
```

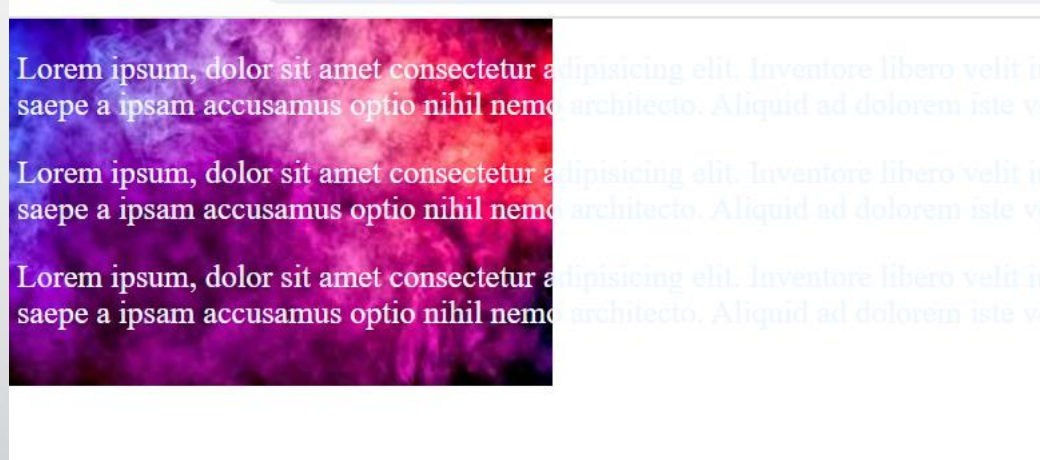


CSS background:no-repeat

Showing the background image only once is also specified by the background-repeat property:

```
body{  
    background-image: url(bg3.jpeg);  
    background-repeat: no-repeat;
```

```
tle>
```



CSS background-position



`background-position: left top;`
`background-position: 0 0;`



`background-position: top;`
`background-position: 50% 0;`



`background-position: right top;`
`background-position: 100% 0;`



`background-position: left;`
`background-position: 0 50%;`



`background-position: center;`
`background-position: 50% 50%;`



`background-position: right;`
`background-position: 100% 50%;`



`background-position: left bottom;`
`background-position: 0 100%;`



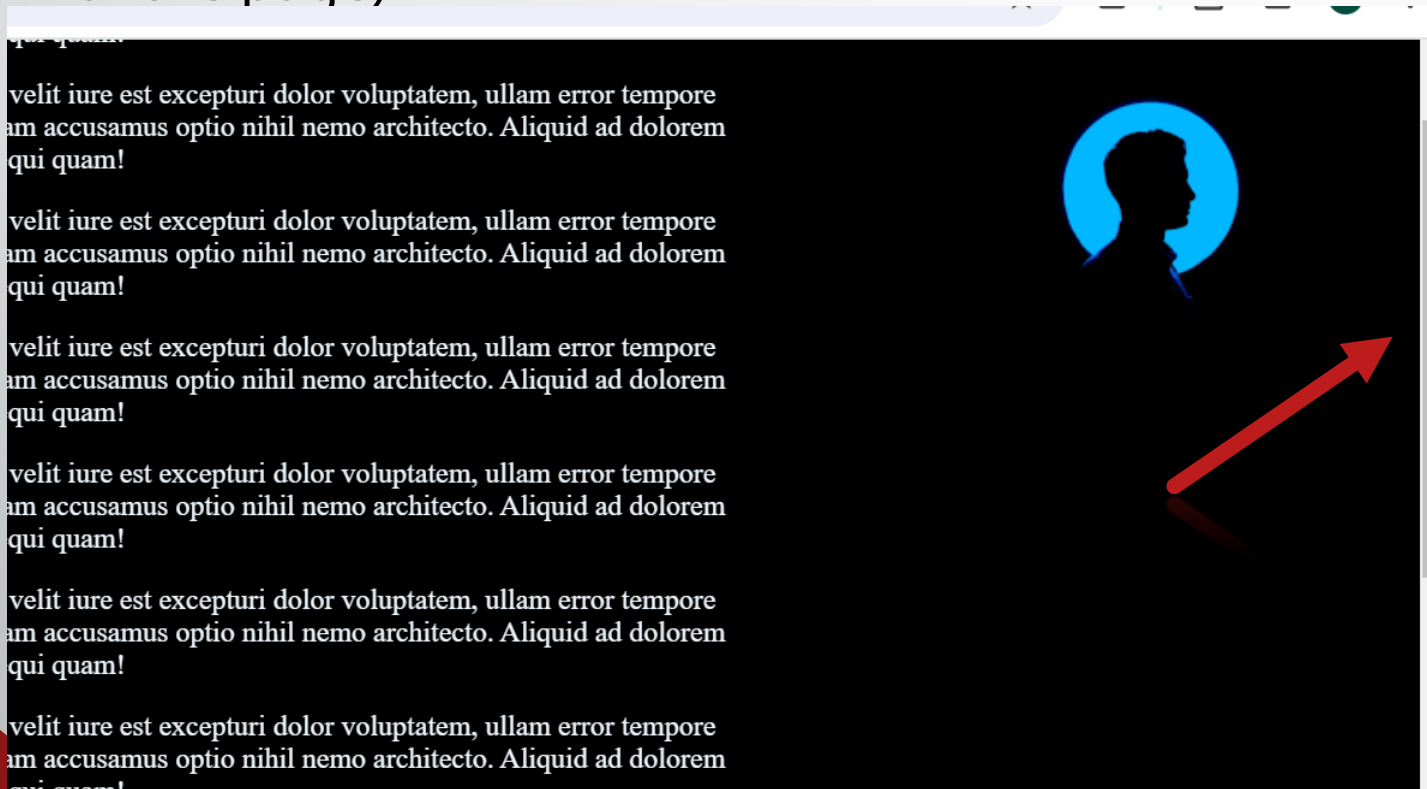
`background-position: bottom;`
`background-position: 50% 100%;`



`background-position: right bottom;`
`background-position: 100% 100%;`

CSS background-attachment

- The background-attachment property specifies whether the background image should scroll or be fixed (will not scroll with the rest of the page)



```
body{  
    background-image: url(profile.png);  
    background-repeat: no-repeat;  
    background-position: top right ;  
    background-attachment: fixed;  
    background-color: black;  
}
```


CSS background-attachment

```
body{  
  background-image: url(profile.png)  
  background-repeat: no-repeat;  
  background-position: top right ;  
  background-attachment: scroll;  
  background-color: ■ black;
```

gnam quos saepe a ipsam accusamus optio nihil nemo architecto. Aliquid ad dolorem
officia, eaque, magni sequi quam!

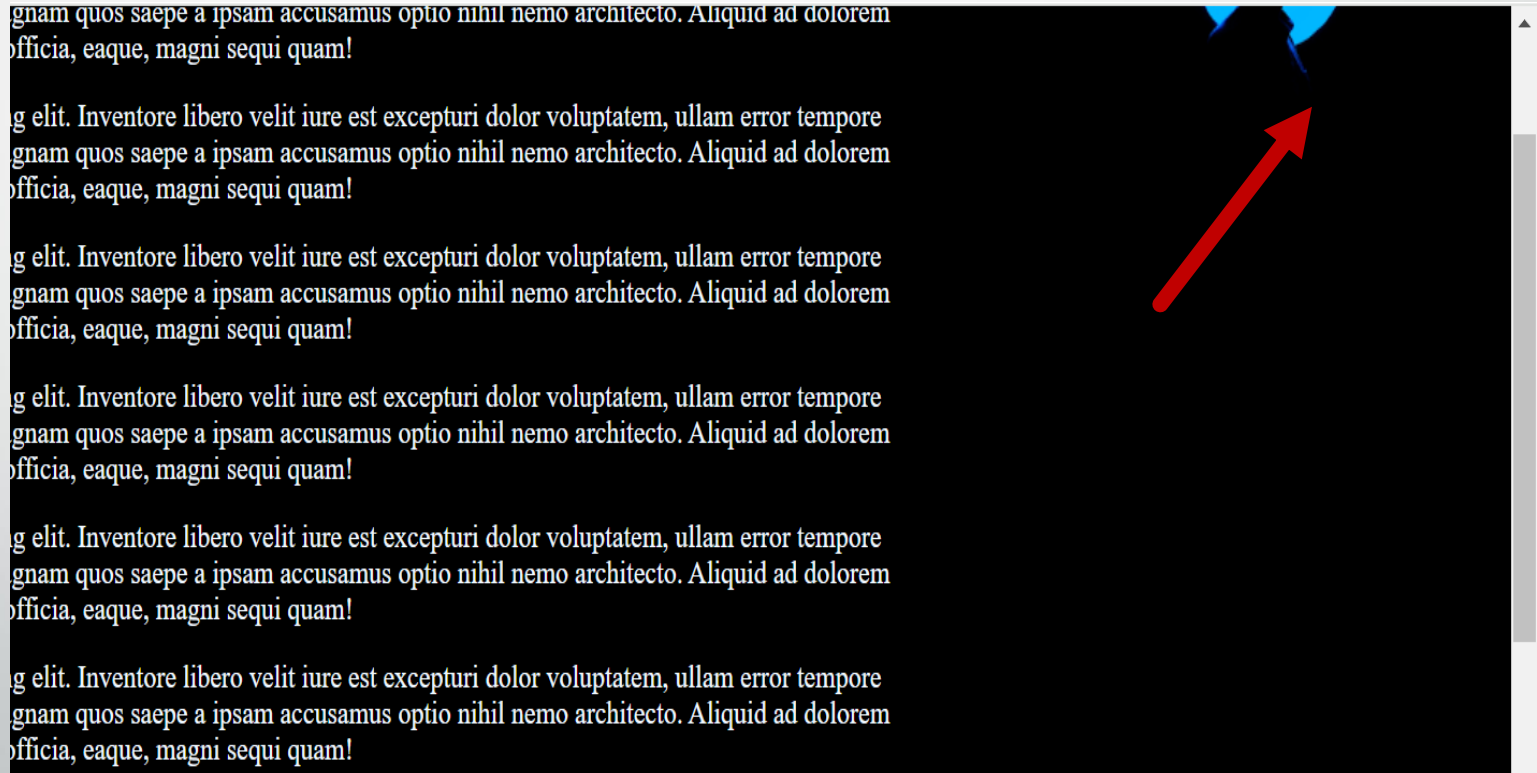
g elit. Inventore libero velit iure est excepturi dolor voluptatem, ullam error tempore
gnam quos saepe a ipsam accusamus optio nihil nemo architecto. Aliquid ad dolorem
officia, eaque, magni sequi quam!

g elit. Inventore libero velit iure est excepturi dolor voluptatem, ullam error tempore
gnam quos saepe a ipsam accusamus optio nihil nemo architecto. Aliquid ad dolorem
officia, eaque, magni sequi quam!

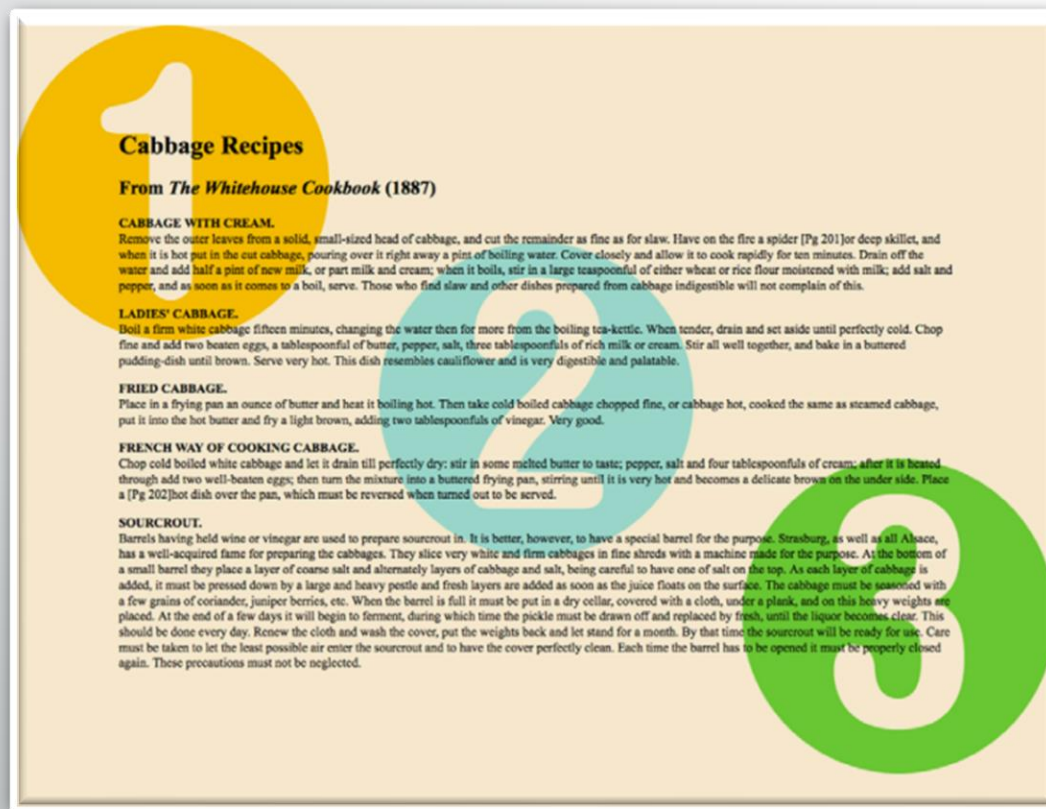
g elit. Inventore libero velit iure est excepturi dolor voluptatem, ullam error tempore
gnam quos saepe a ipsam accusamus optio nihil nemo architecto. Aliquid ad dolorem
officia, eaque, magni sequi quam!

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gnam quos saepe a ipsam accusamus optio nihil nemo architecto. Aliquid ad dolorem
officia, eaque, magni sequi quam!



Multiple backgrounds



```
body {  
  background-image: url(image1.png), url(image2.png), url(image3.png);  
  background-position: left top, center center, right bottom;  
  background-repeat: no-repeat; no-repeat; no-repeat;  
  ...  
}
```

CSS background-size



```
div{  
  height: 600px;  
  border: 4px solid rebeccapurple;  
  background-image: url(labtob\ \ (3\).jpg) ;  
  background-repeat: no-repeat;  
  background-position: center;  
  background-size: contain; a  
  background-size: cover; b  
  background-size: 300px 100px; c  
}
```

</style>



Short hand

```
div{  
  height: 600px;  
  border: 10px dotted red;  
  padding: 10px;  
  /* background-image: url(images.jpeg);  
  background-repeat: no-repeat;  
  background-position: left;  
  background-size: cover;  
  background-origin: padding-box; */  
  
  background: red url(images.jpeg) no-repeat left/cover;  
}
```

CSS background gradient

To create a linear gradient you must define at least two color stops. Color stops are the colors you want to render smooth transitions among. You can also set a starting point and a direction (or an angle) along with the gradient effect.

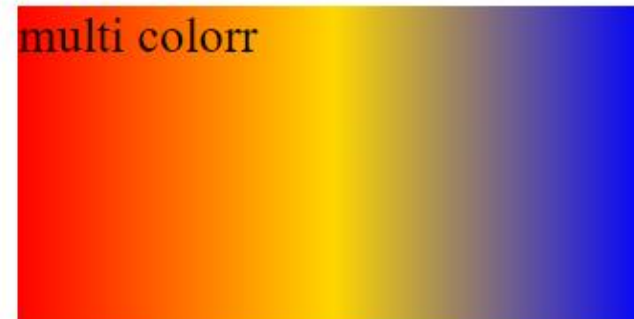
CSS defines three types of gradients:

- Linear Gradients (goes down/up/left/right/diagonally)
- Radial Gradients (defined by their center)
- Conic Gradients (rotated around a center point)

background-image: linear-gradient(*direction*, *color-stop1*, *color-stop2*, ...);

```
<meta charset="UTF-8" />
<meta name="viewport" content="width=device-width, initial-scale=1.0" />
<title>gradient</title>
<link rel="stylesheet" href="gradient.css">
</head>
<body>
  <div class="l" >top </div>
  <div class="r"> to right </div>
  <div class="tr" >to top right </div>
  <div class="b">bottom </div>
  <div class="bl" >bottom left </div>
  <div class="mc" >multi color </div>
  <div class="mix" >mix color </div>
</body>
</html>
```

```
1  div{
2    height: 100px;
3    width: 200px;
4    margin: 2px;
5    display: inline-block;
6  }
7
8  .r{
9    background-image:linear-gradient(to right,red,gold);
10 }
11 .l{
12   background-image:linear-gradient(to top,rgb(155, 13, 146) 40%,rgb(55, 166, 221));
13 }
14 .tr{
15   background-image:linear-gradient(to top right,rgb(92, 57, 219),rgb(229, 16, 151));
16 }
17 .b{
18   background-image:linear-gradient(to bottom ,rgb(57, 200, 219),rgb(229, 16, 151));
19 }
20 .bl{
21   background-image:linear-gradient( to bottom left,rgb(116, 216, 16),rgb(229, 16, 151));
22 }
23 .mc{
24   background-image: linear-gradient( to right,red,gold,blue);
25 }
26 .mix{
27   background-image: linear-gradient( to right,red,gold,white,blue,green,pink,white,gold);
```

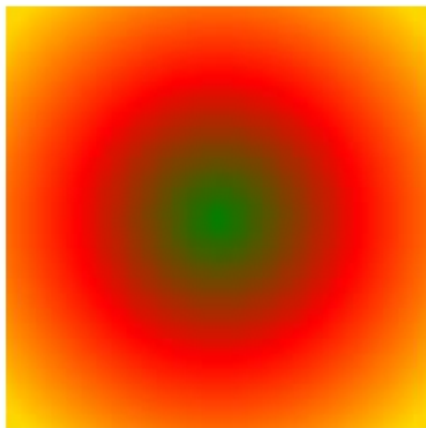
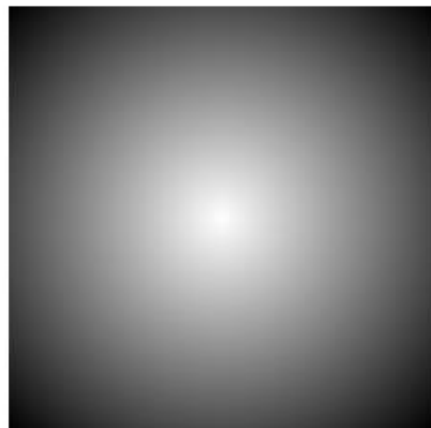


radial gradient

A radial gradient is defined by its center.
To create a radial gradient you must also define at least two color stops.

```
background-image: radial-gradient(shape size at position, start-color, ., last-color);
```

```
rg.html X # gradient.css # style.css ... # gradient.css <> rg.html # rg.css X ...
s-lab > <> rg.html > html > body > div.d
  Click here to ask Blackbox to help you code faster
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4   <meta charset="UTF-8">
5   <meta name="viewport" content="width=device-width, initial-scale=1">
6   <title> radial gradient</title>
7   <link rel="stylesheet" href="rg.css">
8 </head>
9 <body>
10   <div class="d"></div>
11   <div class="c"></div>
12   <div class="l"></div>
13 </body>
14 </html>
css-lab > # rg.css > .d
  Click here to ask Blackbox to help you code faster
1 div{
2   height: 300px;
3   width: 300px;
4   margin: 6px;
5   display: inline-block;
6 }
7 .d{
8   background-image: radial-gradient(circle, white, black);
9 }
10 .c{ background-image: radial-gradient(circle 200px, green, red, gold);
11 }
12 .l{
13   background-image: radial-gradient(circle 200px at left top, rgb(105, 128, 0), red, gold);
14 }
15 }
```



```
body{
  background-image: linear-gradient(to right, #00800029, rgba(0, 0, 0, 0.361), rgba(0, 128, 0, 0.35)),url(p.jpeg);

background-repeat: no-repeat;
background-position:right center;
background-attachment: fixed;
background-size: 100vw,50vh ;
background-size: contain;
background-position: 100% 50%;
}
body:hover{
  background-image: linear-gradient(to right, #0000005c 20%, transparent),url(p.jpeg);
}
```

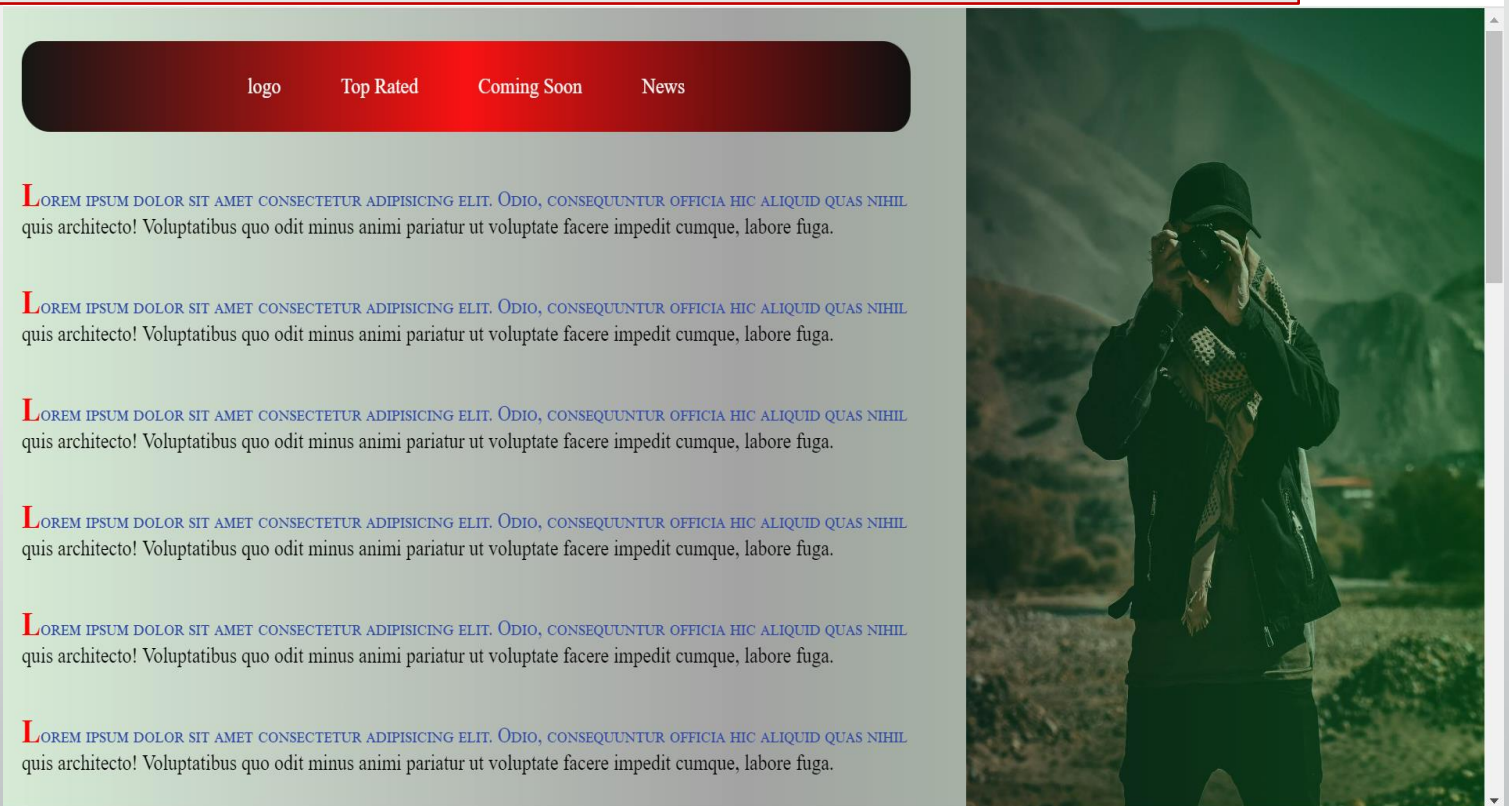


Image Filters

The CSS data type represents a graphical effect that can change the appearance of an input image. It is used in the `filter` and `backdrop-filter` properties.

Filter functions can be combined to create even more complex effects. For example, you could use the `blur()` and `drop-shadow()` functions together to create a soft shadow effect.

Original



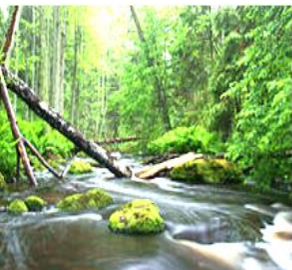
Black & White



Blur



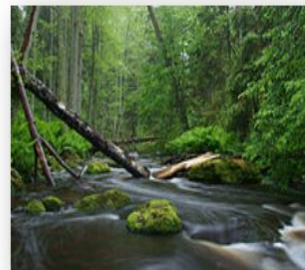
Brighten



Contrast



Drop Shadow



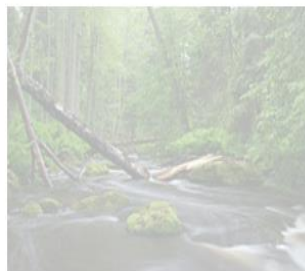
Hue Rotate



Invert



Opacity



Saturated



Sepia



Multiple



```
/* Blur an image */
```

```
img {  
  filter: blur(5px);  
}
```

```
/* Make an image brighter */
```

```
img {  
  filter: brightness(120%);  
}
```

```
/* Increase the contrast of an image */
```

```
img {  
  filter: contrast(150%);  
}
```

```
/* Add a drop shadow to an image */
```

```
img {  
  filter: drop-shadow(10px 10px 5px ■ rgba(0, 0, 0, 0.5));  
}
```

```
/* Convert an image to grayscale */
```

```
img {  
  filter: grayscale(100%);  
}
```

```
/* Change the hue of an image */
```

```
img {  
  filter: hue-rotate(90deg);  
}
```

```
div {  
  width: 300px;  
  height: 300px;  
  background: url(images/sunset.jpg) no-repeat center;  
  filter: drop-shadow(10px 10px 5px rgba(0, 0, 0, 0.5));  
}
```



Bullet point styles

- The list-style-type property allows you to control the shape or style of bullet point.
- It can be used on rules that apply to the , and elements.

UNORDERED LISTS

For an unordered list you can use the following values:

- none
- disc
- circle
- square

ORDERED LISTS

For an ordered (numbered) list you can use the following values:

decimal

1 2 3

decimal-leading-zero

01 02 03

lower-alpha

a b c

upper-alpha

A B C

lower-roman

i. ii. iii.

upper-roman

I II III

Image for bullets and positioning

- You can specify an image to act as a bullet point using list-style-image property.
- By:

List-style-image:url("images/star.png");

- The position property indicates whether the marker should appear on the inside or the outside of the box containing the main points

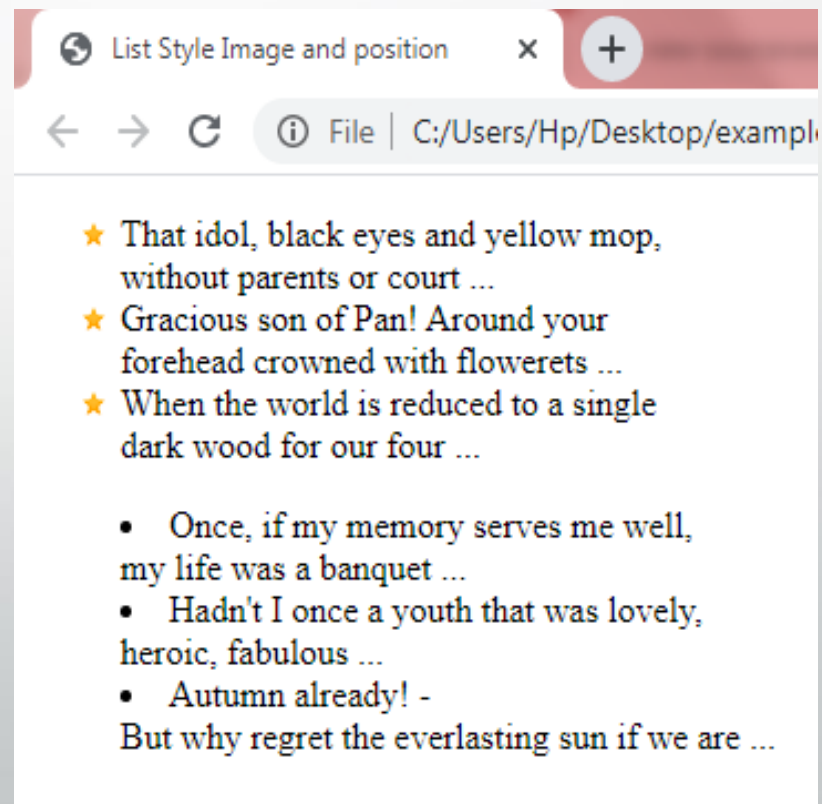
```
<!DOCTYPE html>
<html>
  <head>
    <title>List Style Image and position</title>
    <style type="text/css">
      ul.illuminations {
        list-style-image: url("images/star1.png");

      }

      ul.illuminations {
        list-style-position: outside;}
      ul.season {
        list-style-position: inside;}
    </style>
  </head>
  <body>

    <ul class="illuminations">
      <li>That idol, black eyes and yellow mop,<br>
        without parents or court ...</li>
      <li>Gracious son of Pan! Around your <br>forehead crowned with flowerets ...</li>
      <li>When the world is reduced to a single <br>dark wood for our four ...</li>
    </ul>
```

```
</ul>
<ul class="season">
  <li>Once, if my memory serves me well,<br> my life was a banquet ...</li>
  <li>Hadn't I once a youth that was lovely,<br> heroic, fabulous ...</li>
  <li>Autumn already! - <br>But why regret the everlasting sun if we are ...</li>
</ul>
</body>
</html>
```



Tables

	New York	Chicago	San Francisco
A Poetic Perspective	Sat, 4 Feb 2012 11am - 2pm	Sat, 3 Mar 2012 11am - 2pm	Sat, 17 Mar 2012 11am - 2pm
Walt Whitman at War	Sat, 7 Apr 2012 11am - 1pm	Sat, 5 May 2012 11am - 1pm	Sat, 19 May 2012 11am - 1pm
Found Poems & Outsider Poetry	Sat, 9 Jun 2012 11am - 2pm	Sat, 7 Jul 2012 11am - 2pm	Sat, 21 Jul 2012 11am - 2pm
Natural Death: An Exploration	Sat, 4 Aug 2012 11am - 4pm	Sat, 8 Sep 2012 11am - 4pm	Sat, 15 Sep 2012 11am - 4pm

```
table {
  border-spacing: 0px;
  empty-cells: hide;}
th, td {
  padding: 5px 30px 5px 10px;
  border-spacing: 0px;
  font-size: 90%;
  margin: 0px;}
th, td {
  text-align: left;
  background-color: #e0e9f0;
  border-top: 1px solid #f1f8fe;
  border-bottom: 1px solid #cbd2d8;
  border-right: 1px solid #cbd2d8;}
tr.head th {
  color: #fff;
  background-color: #90b4d6;
  border-bottom: 2px solid #547ca0;
  border-right: 1px solid #749abe;
  border-top: 1px solid #90b4d6;
  text-align: center;
  text-shadow: -1px -1px 1px #666666;
  letter-spacing: 0.15em;}
td {
  text-shadow: 1px 1px 1px #ffffff;}
tr.even td, tr.even th {
  background-color: #e8eff5;}
tr.head th:first-child {
  border-top-left-radius: 5px;}
tr.head th:last-child {
  border-top-right-radius: 5px;}
```

Article submit form

Author

Login:

password:

Email:

Phone number:

Article

Title in English:

Acronym:

Genre:

Text:

Once upon a time ...

Delete

Send


```

fieldset {
  width: 500px;
  border: 1px solid #ada3a3;
  background-color: #faebef;
  border-radius: 5px;
}
legend {
  font-style: italic;
  color: #666666;
  input {
    color: #5a5854;
    background-color: #ffdfd3;
    border: 1px solid #bdbdbd;
    border-radius: 5px;
    padding: 5px 5px 5px 30px;
    background-repeat: no-repeat;
    background-position: 8px 9px;
    margin-bottom: 10px;
  }
  input[type="text"] {
    width: 120px;
    border: 1px solid #d6d6d6;
    padding: 2px;
    outline: none;
    input[type="email"] {
      background-image: url("images/mail.png");
      font-size: 120%;
    }
    input[type="number"] {
      background-image: url("images/phone.png");
      font-size: 120%;
    }
  }
}

```

```

input[type="text"]:focus,
input[type="text"]:hover {
  background-color: #d0e2f0;
  border: 1px solid #999999;
}
input[type="submit"] {
  border: 1px solid #006633;
  background-color: #009966;
  color: #ffffff;
  border-radius: 5px;
  padding: 5px;
  margin-top: 10px;
  input[type="reset"] {
    border: 1px solid #006633;
    background-color: #009966;
    color: #ffffff;
    border-radius: 5px;
    padding: 5px;
    margin-top: 10px;
  }
  input[type="submit"]:hover {
    border: 1px solid #006633;
    background-color: #00cc33;
    color: #ffffff;
    cursor: pointer;
  }
  input[type="reset"]:hover {
    border: 1px solid #006633;
    background-color: #00cc33;
    color: #ffffff;
    cursor: pointer;
  }
}

```

```

.title {
  float: left;
  width: 160px;
  clear: left;
  .delete
.submit {
  width: 310px;
  text-align: right;
}
iframe {
  width: 700px;
  height: 500px;
}

```

Position

- The position property specifies the type of positioning method used for an element.
- There are five different position values:
 1. static
 2. relative
 3. fixed
 4. absolute
 5. Sticky
- Elements are then positioned using the top, bottom, left, and right properties. However, these properties will not work unless the position property is set first. They also work differently depending on the position value.

position: static

- HTML elements are positioned static by default.
- Static positioned elements are not affected by the top, bottom, left, and right properties.
- An element with position: static; is not positioned in any special way; it is always positioned according to the normal flow of the page.

position: relative

- An element with `position: relative;` is positioned relative to its normal position.
- Setting the `top`, `right`, `bottom`, and `left` properties of a relatively-positioned element will cause it to be adjusted away from its normal position. Other content will not be adjusted to fit into any gap left by the element.

position: fixed

- An element with position: fixed; is positioned relative to the viewport, which means it always stays in the same place even if the page is scrolled. The top, right, bottom, and left properties are used to position the element.
- A fixed element does not leave a gap in the page where it would normally have been located.

position: absolute

- An element with position: absolute; is positioned relative to the nearest positioned ancestor (instead of positioned relative to the viewport, like fixed).
- However; if an absolute positioned element has no positioned ancestors, it uses the document body, and moves along with page scrolling.
- **Note:** A "positioned" element is one whose position is anything except static.

position: sticky

- An element with position: sticky; is positioned based on the user's scroll position.
- A sticky element toggles between relative and fixed, depending on the scroll position. It is positioned relative until a given offset position is met in the viewport - then it "sticks" in place (like position:fixed).

```

*{
  margin: 0;
  padding: 0;
}
nav {
width: 60%;
  background-image: linear-gradient(to right, black, red, black);
  text-align: center;
  opacity: 0.9;
  padding: 30px 0;
  border-radius: 20px 30px;
  margin: 30px 20px;
  position: sticky;
  top: 0;
}
.cont{
background-image: linear-gradient(to right, #800045a, #0000005c, #008000059),url(a.avif) ;
background-repeat: no-repeat;
background-attachment: fixed;
background-size: contain;
background-position: 100% 50%;
}
.cont:hover{
  background-image: linear-gradient(to right, #0000005c 20%, transparent),url(p.jpeg);
}
p{
  width: 60%;
  margin: 40px 20px;
  font-size: 20px;
}
a {
  color: white;
  padding: 15px 30px;
  text-decoration: none;
  font-size: 20px;
}

```

```

<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8" />
    <meta name="viewport" content="width=device-width, initial-scale=1.0" />
    <title>profile</title>
    <link rel="stylesheet" href="style1.css" />
    <link rel="stylesheet" href="font.css">
  </head>
  <body>
    <div class="cont">
      <nav>
        <a href="dddd">logo</a>
        </span>
        <a href="dddd">Top Rated</a>
        <a href="dddd">Coming Soon</a>
        <a href="dddd">News</a>
      </nav>
      <div class="se">search <input type="text" required> </div>
      <p>Lorem ipsum dolor sit amet consectetur adipisicing elit. Odio, consequuntur officia
      <p>Lorem ipsum dolor sit amet consectetur adipisicing elit. Odio, consequuntur officia
      <p>Lorem ipsum dolor sit amet consectetur adipisicing elit. Odio, consequuntur officia
      <p>Lorem ipsum dolor sit amet consectetur adipisicing elit. Odio, consequuntur officia
      <p>Lorem ipsum dolor sit amet consectetur adipisicing elit. Odio, consequuntur officia
      <p>Lorem ipsum dolor sit amet consectetur adipisicing elit. Odio, consequuntur officia
      <p>Lorem ipsum dolor sit amet consectetur adipisicing elit. Odio, consequuntur officia
    53     font-size: 30px;
    54     color: #f4e6e6;
    55     text-align: left;
    56     margin-left: 300px;
    57
    58   }
    59   h1:hover, p:hover{
    60     background-image: linear-gradient(#008077 , #8f7b7b82 );
    61     padding: 20px 0;
    62     transition: 0.9s all;
    63     border-radius: 15px;
    64     ||| }
    65
    66

```


logo

Top Rated

Coming Soon

News

search

Lorem ipsum dolor sit amet consectetur adipisicing elit. Odio, consequuntur officia hic aliquid quas nihil quis architecto! Voluptatibus quo odit minus animi pariatur ut voluptate facere impedit cumque, labore fuga.

logo

Top Rated

Com

Lorem ipsum dolor sit amet consectetur adipisicing elit. Odio, consequuntur officia hic

search

Lorem ipsum dolor sit amet consectetur adipisicing elit. Odio, consequuntur officia hic aliquid quas nihil quis architecto! Voluptatibus quo odit minus animi pariatur ut voluptate facere impedit cumque, labore fuga.



Overlapping Elements

- When elements are positioned, they can overlap other elements.
- The **z-index property** specifies the stack order of an element (which element should be placed in front of, or behind, the others).
- An element can have a **positive** or **negative** stack order:

Basic Dropdown

- Create a dropdown box that appears when the user moves the mouse over an element.
- The **:hover** selector is used to show the dropdown menu when the user moves the mouse over the dropdown button.

lecutres

lec1

lec2

lec3

```
1  OCTYPE html>
2  m1 lang="en">
3  ad>
4    <meta charset="UTF-8">
5    <link rel="stylesheet" href="drop.css">
6    <title>dropdownM</title>
7  </head>
8  <body>
9    <div class="dropdown">
10      <button>lecutres</button>
11      <div class="dropdown-content">
12        <a href="#">lec1</a>
13        <a href="#">lec2</a>
14        <a href="#">lec3</a>
15      </div>
16    </div>
17  </body>
18 </html>
```

```
1  .dropdown {
2    display: inline-block;
3    position: relative;
4  }
5  .dropdown-content {
6    display: none;
7    position: absolute;
8    width: 100%;
9    overflow: auto;
10   box-shadow: 0px 10px 10px 0px #a02d2d66;
11 }
12 .dropdown:hover .dropdown-content {
13   display: block;
14 }
15 .dropdown-content a {
16   display: block;
17   color: #000000;
18   padding: 5px;
19   text-decoration: none;
20 }
21 .dropdown-content a:hover {
22   color: #FFFFFF;
23   background-color: #00A4BD;
24 }
```

Tooltip

- A tooltip is often used to specify extra information about something when the user moves the mouse pointer over an element



```
<style>
.tooltip {
  position: relative;
  display: inline-block;
  border-bottom: 1px dotted black;
}
.tooltip .tooltiptext {
  visibility: hidden;
  width: 120px;
  background-color: black;
  color: white;
  text-align: center;
  border-radius: 6px;
  padding: 5px 0;

  /* Position the tooltip */
  position: absolute;
  z-index: 1;
}
.tooltip:hover .tooltiptext {
  visibility: visible;
}
</style>
<body style="text-align:center;">
<p>Move the mouse over the text below:</p>
<div class="tooltip">Hover over me
  <span class="tooltiptext">Tooltip text</span>
</div>
```

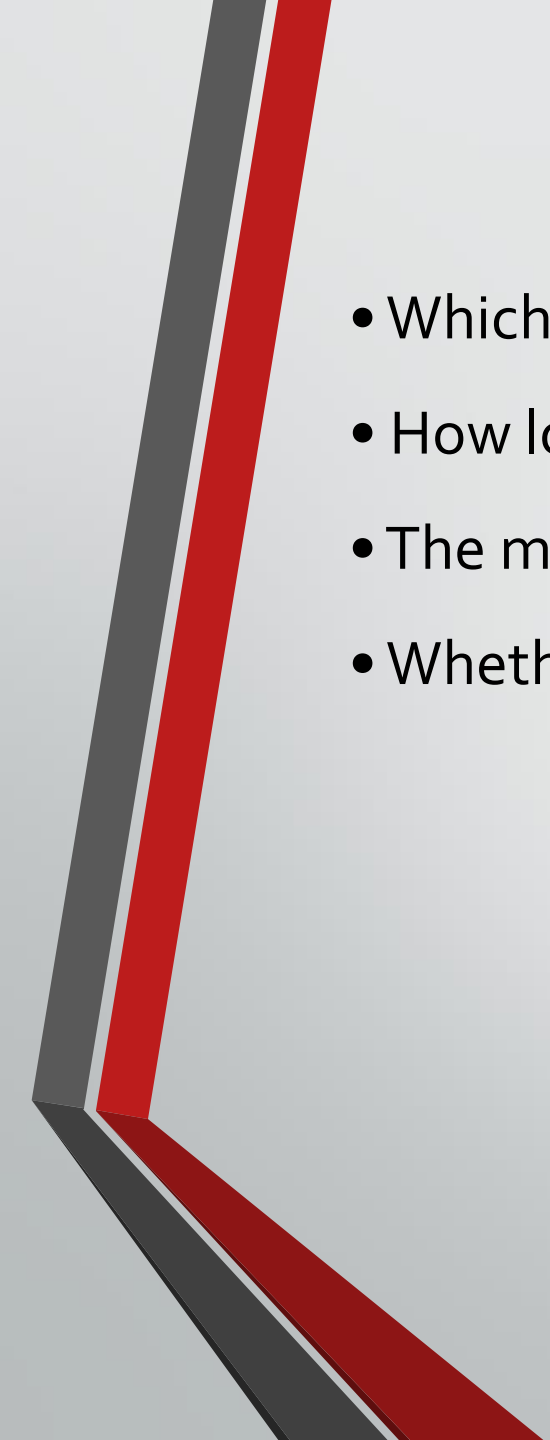
CSS Transitions

- CSS transitions allows you to change property values smoothly, over a given duration.

To create a transition effect, you must specify two things:

- the CSS property you want to add an effect to
- the duration of the effect.

Note: If the duration part is not specified, the transition will have no effect, because the default value is 0.

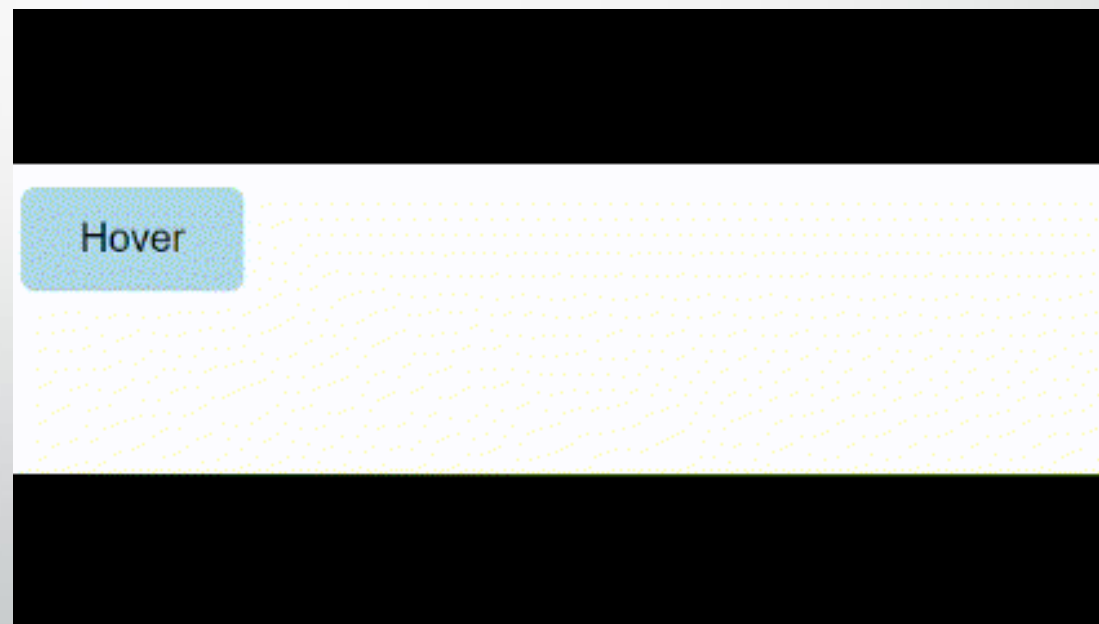
- 
- Which CSS property to change (**transition-property**)
 - How long it should take (**transition-duration**)
 - The manner in which the transition accelerates (**transition-timingfunction**)
 - Whether there should be a pause before it starts (**transition-delay**)

Specify the Speed Curve of the Transition

- The **transition-timing-function** property specifies the speed curve of the transition effect.
 - **ease** - specifies a transition effect with a slow start, then fast, then end slowly (this is default)
 - **linear** - specifies a transition effect with the same speed from start to end
 - **ease-in** - specifies a transition effect with a slow start
 - **ease-out** - specifies a transition effect with a slow end
 - **ease-in-out** - specifies a transition effect with a slow start and end

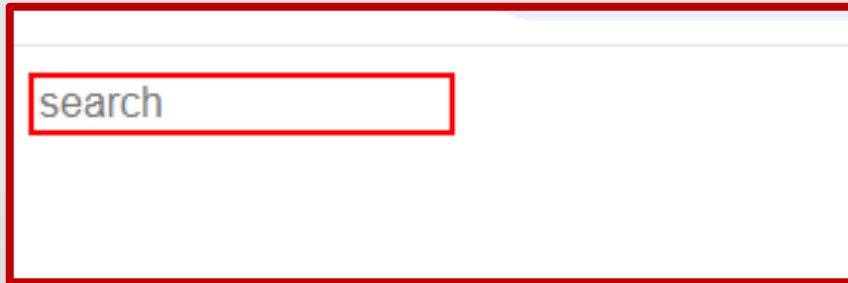

```
.button {  
  background-color: lightblue;  
  padding: 10px 20px;  
  border: none;  
  border-radius: 5px;  
  /* transition-property: all;  
  transition-duration: 2s;  
  transition-timing-function: ease ;  
  transition-delay: 1s; */  
  transform: all , 2s, ease, 1s;  
}  
  
.button:hover {  
  background-color: red;  
  color: white ;  
  width: 400px;  
}
```

`<button class="button">Hover </button>`



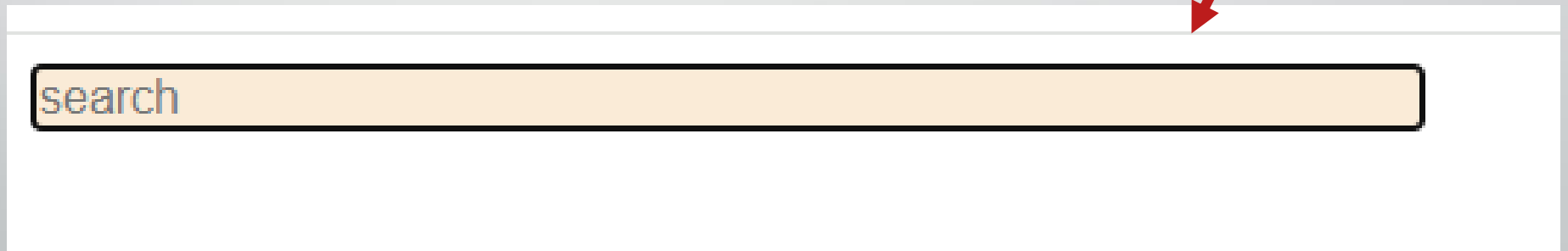
example.html / > html / > body / > form / > input

```
<form action="">
  <input type="text" name="" placeholder="search">
</form>
</body>
</html>
```



example.css / ...

```
58 } */
59
60 input{
61     width: 130px;
62     border: 2px solid red;
63 }
64 input:focus{
65     width: 50%;
66     background-color: antiquewhite;
67     transition: width 2s ease-in-out;
68     border: 2px solid #876204;
69 }
```

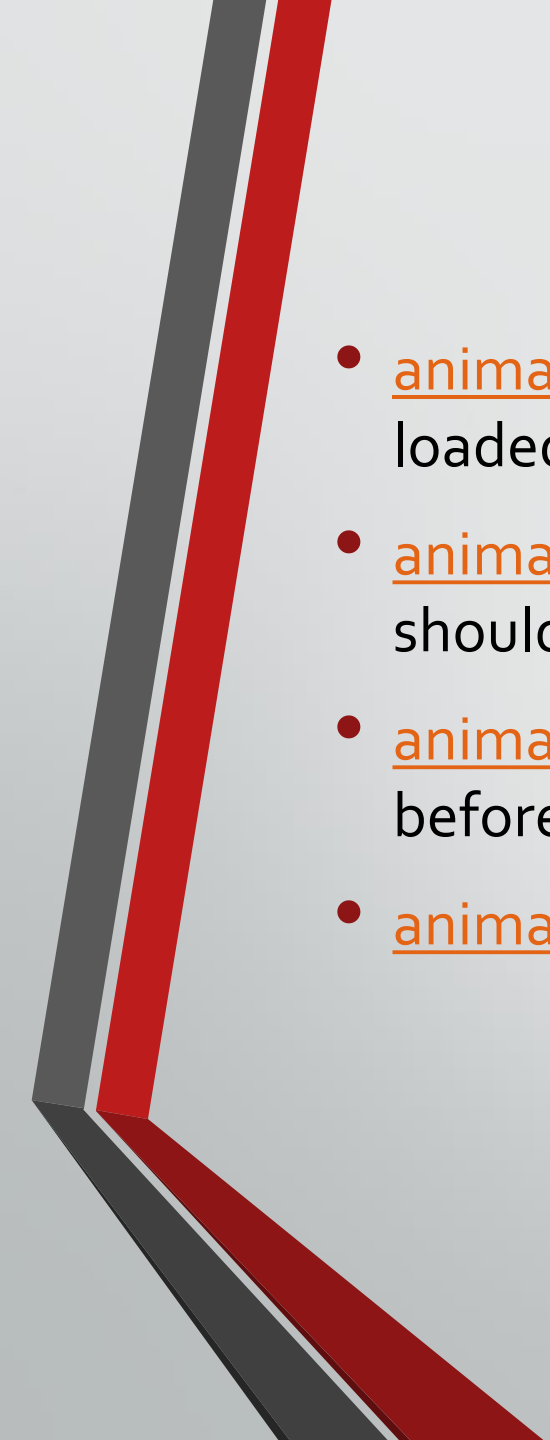


Animations

- an **animation** lets an element gradually change from one style to another.
- You can change as many CSS properties you want, as many times you want.
- They're easy to use for simple animations; you can create them without even having to know JavaScript.
- To use CSS animation, you must first specify some **keyframes** for the animation.

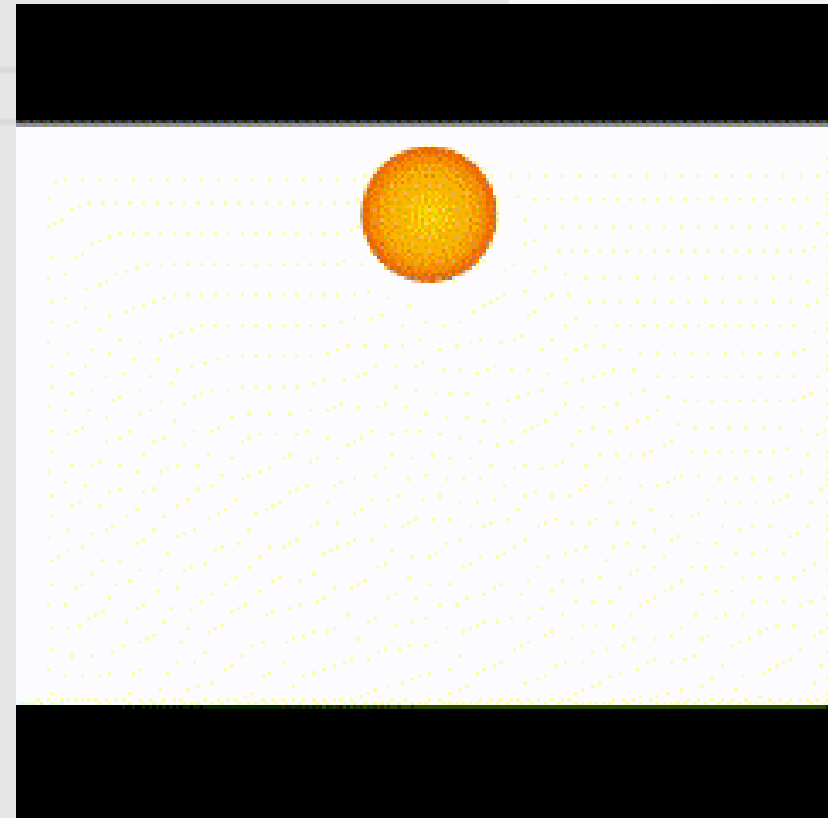
Configuring the animation

- **animation-name** Specifies the name of the @keyframes at-rule describing the animation's keyframes.
- animation-duration Configures the length of time that an animation should take to complete one cycle.
- animation-timing-function Configures the timing of the animation; that is, how the animation transitions through keyframes, by establishing acceleration curves.
- animation-direction Configures whether or not the animation should alternate direction on each run through the sequence or reset to the start point and repeat itself.

- 
- animation-delay Configures the delay between the time the element is loaded and the beginning of the animation sequence.
 - animation-iteration-count Configures the number of times the animation should repeat; you can specify infinite to repeat the animation indefinitely.
 - animation-fill-mode Configures what values are applied by the animation before and after it is executing.
 - animation-play-state Lets you pause and resume the animation sequence.

example

```
.a{
height: 50px;
width: 50px;
background-image: radial-gradient(■gold, ■orange, ■red);
margin: auto;
border-radius: 50%;
animation-name: sun;
animation-duration: 2s;
animation-delay: 1s;
}
@keyframes sun{
  from{
    width: 0;
    height: 0;
  }
  to{
width: 200px;
height: 200px;
  }
}
```



```

.b img {
  animation-name: cube;
  animation-duration: 2s;
  animation-delay: 0s;
  width: 100px;
  animation-iteration-count: 1;
  animation-direction: normal;
  animation-fill-mode: forwards;
}

```

```

/* html code <div class="b"></div> */

```

```

@keyframes cube {
  0% {
    transform: rotateY(0deg)
    translateX(50px)
  }
  25% {
    translate: 0 200px;
    rotate: 180deg;
  }
  50% {
    translate: 200px 200px;
    rotate: 270deg;
  }
}

```



```

11 @keyframes cube {
15 }
16 25% {
17     translate: 0 200px;
18     rotate: 180deg;
19 }
20 50% {
21     translate: 200px 200px;
22     rotate: 270deg;
23 }
24 /* 70% {
25     translate: 200px 0;
26     rotate: 360deg;
27 } */
28 100% {
    translate: 200px 200px;
    rotate: 360deg;
    width: 400px;
}

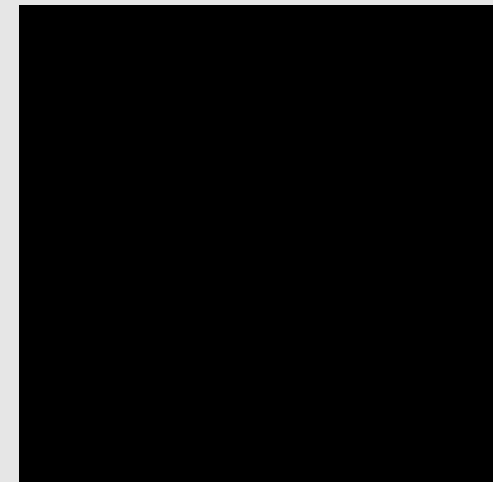
.b img:hover{animation-play-state: paused;
}

```

example

```
9 <body>
0 |   <div class="con">
1 |     <span>2</span>
2 |     <span>0</span>
3 |     <span>2</span>
4 |     <span>4</span>
5 |   </div>
```

```
1 body{
2   height: 100vh;
3   font-size: 5rem;
4   font-family: Impact, Haettenschweiler, 'Arial Narrow Bold', sans-serif;
5   background: ■ #000;
6   .con> span{
7     animation: glow 2s linear infinite;
8   }
9   @keyframes glow{
10    0% ,100%{
11      color: □ aliceblue;
12      text-shadow: 0 0 20px ■ rgb(226, 43, 119) , 0 0 70px □ rgb(226, 223, 43) ,0 0 150px
13    }
14    10% ,80%{
15      color: ■ black;
16      text-shadow: none;}
17  }
18  .con > span:nth-child(2){
19    animation-delay: .25s;
20  }
21  .con >span:nth-child(3){
22    animation-delay: .5s;
23  }
24  .con > span:nth-child(4){
25    animation-delay: 1s;
26  }
27  .con > span:nth-child(5){
28    animation-delay: 1.25s;
29  }
```



example

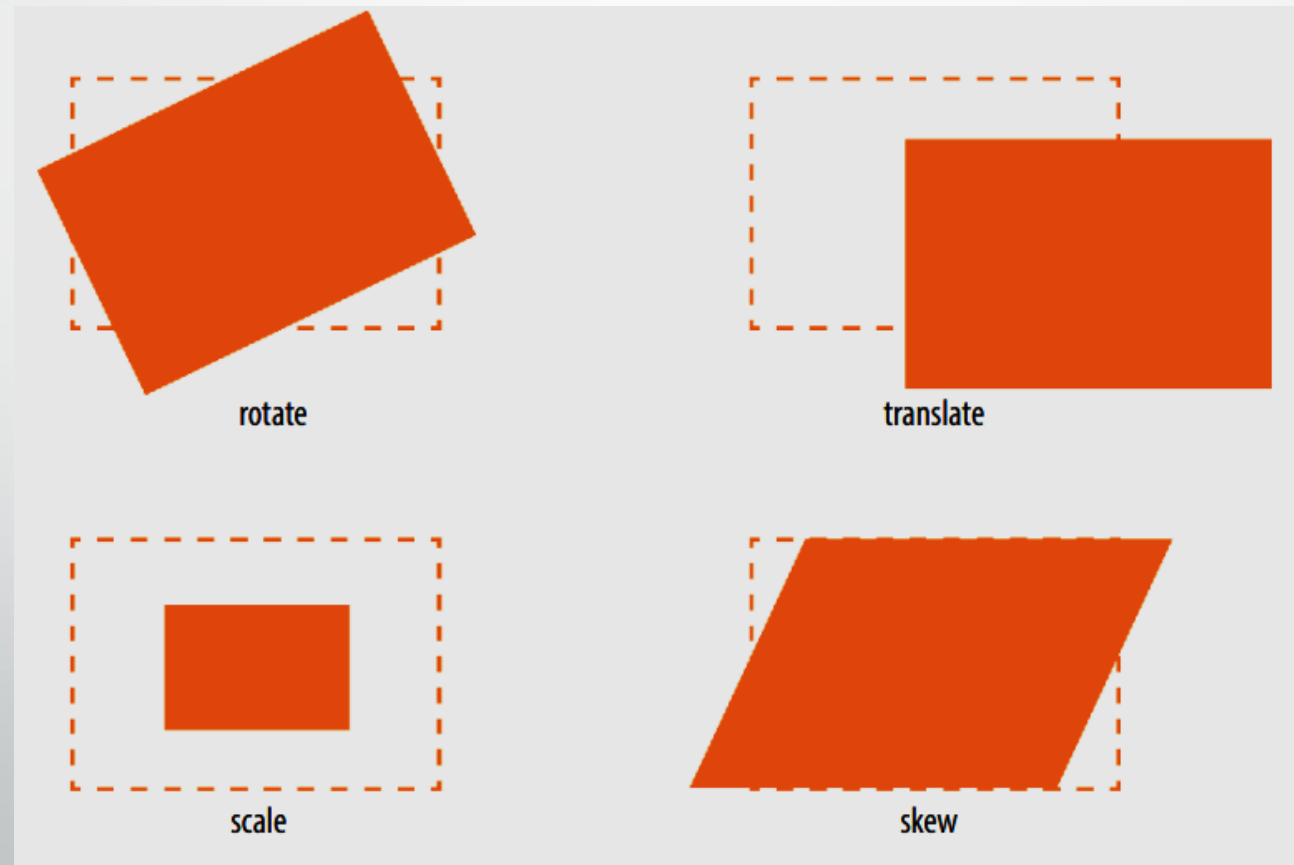
```
@import url('https://fonts.googleapis.com/css2?family=Leckerli One');
body {
  margin: 0;
  padding: 0;
  font-family: "Leckerli One", cursive;
  font-weight: 400;
  font-style: normal;
  background-color: #1c0674;
}
h1 {
  margin: 200px 0;
  padding: 0;
  font-size: 80px;
  position: relative;
  color: rgba(37, 125, 239, 0.938);
}
h1:before {
  content: "web design 2024";
  position: absolute;
  top: 0;
  left: 0;
  width: 100%;
  height: 100%;
  color: white;
  overflow: hidden;
  animation: animate 6s infinite;
}
```

```
29 @keyframes animate {
30   0% {
31     height: 25%;
32   }
33   25% {
34     height: 50%;
35   }
36   50% {
37     height: 65%;
38   }
39   75% {
40     height: 40%;
41   }
42   100% {
43     height: 25%;
44   }
45 }
```

web design 2024

Transform

The CSS3 Transforms module gives a way to rotate, relocate, resize, and skew HTML elements in both two and three-dimensional space

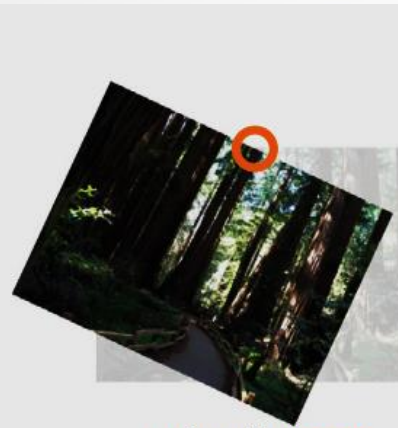


```
img {  
  width: 300px;  
  height: 400px;  
  transform: rotate(-10deg);  
}
```

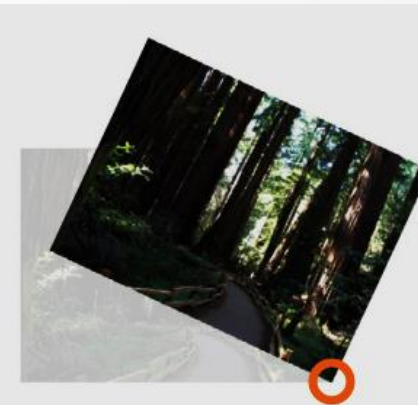


Rotating an img element using transform: rotate().

Changing the point around which the image rotates using transform-origin



transform-origin: center top;



transform-origin: 100% 100%;



transform-origin: 400px 0;



transform: translate(90px, 60px);



transform: translate(-5%, -25%);

Moving an element around with the translate function.



transform: scale(1.25);



transform: scale(.75);



transform: scale(1.5, .5);

Changing the size of an element with the scale function



transform: skewX(15deg);



transform: skewY(30deg);

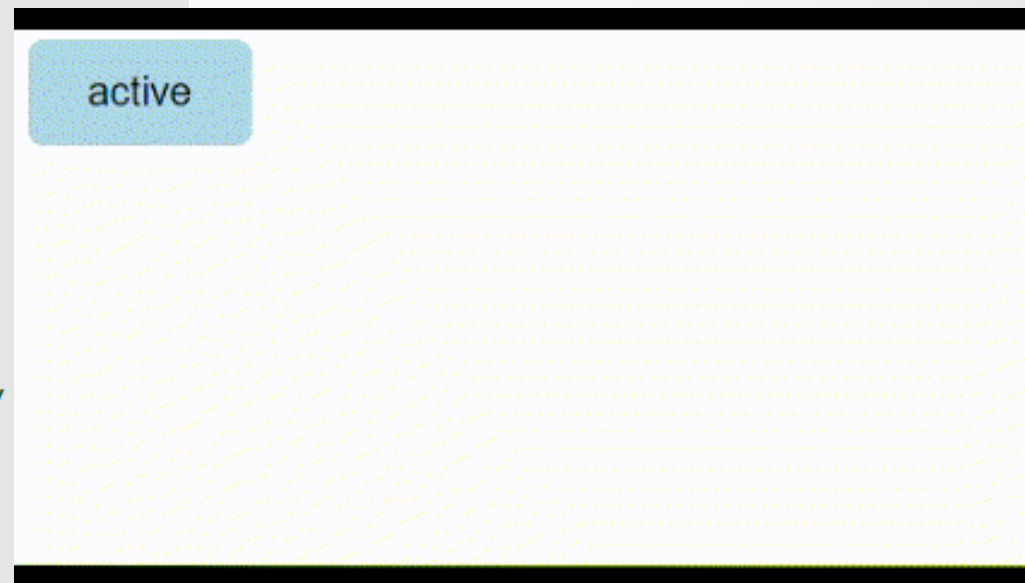


transform: skew(15deg, 30deg);

. Slanting an element using the skew function

matrix(scaleX, skewY, skewX, scaleY, translateX, translateY)


```
.button {  
  background-color: lightblue;  
  padding: 10px 20px;  
  border: none;  
  border-radius: 5px;  
}  
  
.button:active{  
  color: aliceblue;  
  background-color: #817fba;  
  /* transform: scale(2); */  
  /* scale: 2; */  
  /* transform: skew(30deg ,30deg); */  
  /* transform: translate(100px ,100px); */  
  /* translate: (100px ,100px) ; */  
  /* rotate: 45deg; */  
  transform: matrix(2,0,0,2,100,100);  
}
```



```
<button class="button">active </button>
```

example

```
<head>
  <style>
    body {
      margin: 0;
      padding: 0;
      background: #3f2c4f;
    }
    .circle {
      position: absolute;
      top: 40%;
      left: 50%;
      transform: translate(-40%, -50%);
      animation: effect 1s linear infinite;
      width: 100px;
      height: 100px;
      border-radius: 50%;
      border: 6px solid rgba(255, 255, 255, 0.3);
      border-top-color: #fff;
    }
    @keyframes effect {
      0% {
```

```
11      .circle {
21        border-top-color: #fff;
22      }
23      @keyframes effect {
24        0% {
25          transform: rotate(0deg);
26        }
27
28        100% {
29          transform: rotate(360deg);
30        }
31      }
32    }
33  </style>
34 </head>
35
36 <body>
37   <div class="circle"></div>
38 </body>
39
40 </html>
41
```





```
3 <html>
4 <head>
5   <meta charset="UTF-8" />
6   <title> z-index transition</title>
7   <link rel="stylesheet" href="style.css" />
8 </head>
9 <body>
10  <div class="container">
11    <div class="icon-image">
12      <div class="icon">
13        
14      </div>
15      <div class="hover-image ">
16        <div class="img">
17          
18        </div>
19      </div>
20    </div>
21    <div class="icon-image">
22      <div class="icon">
23        
24      </div>
25      <div class="hover-image">
26        <div class="img">
27          
28        </div>
```

```
1  @import url('https://fonts.googleapis.com/css2?family=Poppins:wght@200;300;400;500;600;700');
2  *{
3      margin: 0;
4      padding: 0;
5      font-family: 'Poppins', sans-serif;
6  }
7  body{
8      height: 100vh; width: 100%; display: flex; justify-content: center;
9      align-items: center;
10     background-image: linear-gradient(rgba(0, 0, 0, 0.646) , rgba(0, 0, 255, 0.527));}
11     .container{
12         height: 500px; display: flex; min-width: 400px; align-items: flex-end;
13         justify-content: center;
14         margin-top: -55px; }
15     .icon-image{
16         position: relative;
17         height: 70px; width: 70px; margin: 0 5px; cursor: pointer;
18         box-shadow: 0 5px 10px rgba(0, 0, 0, 0.25);
19         border-radius: 50%; background: #fff;
20     }
21     .icon-image .icon img{
22         position: absolute; height: 95%; width: 95%; left: 50%; top: 50%;
23         transform: translate(-50%, -50%); background-size: cover; border-radius: 50%;
24         border: 3px solid #0396FF;
25     }
26     .icon-image .hover-image{
27         position: absolute; height: 350px; width: 300px; bottom: 100px;
28         left: 50%; z-index: 1; transform: translateX(-60%); border-radius: 25px;
29         pointer-events: none; box-shadow: 0 5px 10px rgba(0, 0, 0, 0.658);
30         transition: transform 0.5s ease, z-index 0s, left 0.5s ease ; transition-delay: 0s, 0.5s, 0.5s;
31     }
32     .icon-image:hover .hover-image{
33         left: -200px; z-index: 12;
34         transform: translateX(80px); transition: left 0.5s ease, z-index 0s, transform 0.5s ease;
35         transition-delay: 0s, 0.5s, 0.5s;
36     }
37     .hover-image img{
38         position: absolute; height: 100%;
39         width: 100%; background-size: cover;
40         border: 3px solid #fff; border-radius: 25px;
41     }
```



```

1  *{
2    margin: 0;
3    padding: 0;
4    list-style: none;
5  }
6  body{
7    display: flex;
8    height: 100vh;
9    text-align: center;
10   align-items: center;
11   justify-content: center;
12   background: #262626;
13 }
14 ul{
15   display: flex;
16   ul li{
17     position: relative;
18     display: block;
19     color: #666;
20     font-size: 30px;
21     height: 60px;
22     width: 60px;
23     background: #171515;
24     line-height: 60px;
25     border-radius: 50%;
26     margin: 0 15px;
27     cursor: pointer;
28     transition: .5s;
29   }

```

```

29 }
30
31 ul li:nth-child(1):hover{
32   color: #456cba;
33   box-shadow: 0 0 15px #4267B2;
34   text-shadow: 0 0 15px #4267B2;
35 }
36 ul li:nth-child(2):hover{
37   color: #26a4f2;
38   box-shadow: 0 0 15px #1DA1F2;
39   text-shadow: 0 0 15px #1DA1F2;
40 }
41 ul li:nth-child(3):hover{
42   color: #e23670;
43   box-shadow: 0 0 15px #E1306C;
44   text-shadow: 0 0 15px #E1306C;
45 }
46 ul li:nth-child(4):hover{
47   color: #2a6cbb;
48   box-shadow: 0 0 15px #2867B2;
49   text-shadow: 0 0 15px #2867B2;
50 }
51 ul li:nth-child(5):hover{
52   color: #ff1a1a;
53   box-shadow: 0 0 15px #ff0000;
54   text-shadow: 0 0 15px #ff0000;
55 }
56

```

```

</head>
<body>
  <ul>
    <li><i class="fab fa-facebook-f"></i></li>
    <li><i class="fab fa-twitter"></i></li>
    <li><i class="fab fa-instagram"></i></li>
    <li><i class="fab fa-linkedin-in"></i></li>
    <li><i class="fab fa-youtube"></i></li>
  </ul>
</body>

```

