

Cascading Style Sheet

CSS2 - CSS/P - CSS3

Achieving separation between content and presentation

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0//EN">
<HTML>
  <HEAD>
    <TITLE>Hello World</TITLE>
  </HEAD>
  <BODY>
    <H1>Hello World!</H1>
    <p>Usiamo i CSS</p>
  </BODY>
</HTML>
```

hello.html

Hello World!

Usiamo i CSS

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0//EN">
<HTML>
  <HEAD>
    <TITLE>Hello World con CSS</TITLE>
    <LINK rel="stylesheet" href="hello.css" type="text/css">
  </HEAD>
  <BODY>
    <H1>Hello World!</H1>
    <p>Usiamo i CSS</p>
  </BODY>
</HTML>
```

hello.html

```
BODY { color: red }
H1 { color: blue }
```

hello.css

Hello World!

Usiamo i CSS

WEB CSS

The goal

CSS Zen Garden

The Beauty of CSS Design



A demonstration of what can be accomplished through CSS-based design. Select any style sheet from the list to load it into this page. Download the example HTML file or CSS file.

The Road to Enlightenment

Littering a dark and dreary road lay the past relics of browser-specific tags, incompatible DOMs, broken CSS support, and abandoned browsers.

We must clear the mind of the past. Web enlightenment has been achieved thanks to the tireless efforts of folk like the W3C, Wasp, and the major browser creators.

The CSS Zen Garden invites you to relax and meditate on the important lessons of the masters. Begin to see with clarity. Learn to use the time-honored techniques in new and invigorating fashion. Become one with the web.

So What is This About

There is a continuing need to show the power of CSS. The Garden aims to excite, inspire, and encourage participation. To begin, view some of the existing designs in the list. Click on any one will load the style sheet into this very page. The remains the same, the only thing that has changed is the external CSS file. Yes, really.

CSS allows complete and total control over the style of a hypertext document. The only way this can be illustrated is by demonstrating what it can truly be, once the reins are placed in the hands of those who create beauty from structure. Designers and coders alike have contributed to the beauty of the web; we can always push it further.

Participation

Strong visual design has always been our focus. You are modifying this page, so strong CSS skills are necessary too, but the example files are commented well enough that even CSS novices can use them as starting points. Please see the [CSS Resource Guide](#) for advanced tutorials and tips on working with CSS.



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THE ROAD TO ENLIGHTENMENT

BENEFITS

Why participate? For recognition, inspiration, and a resource we can all refer to showing people how amazing CSS really can be. This site serves as equal parts inspiration for those working on the web today, learning tool for those who will be tomorrow, and gallery of future techniques we can all look forward to.

REQUIREMENTS

Where possible, we would like to see mostly CSS 1 & 2 usage. CSS 3 & 4 should be limited to widely-supported elements only, or strong fallbacks should be provided. The CSS Zen Garden is about functional, practical CSS and not the latest bleeding-edge tricks viewable by 2% of the browsing public. The only real requirement we have is that your CSS validates.

Luckily, designing this way shows how well various browsers have implemented CSS by now. When sticking to the guidelines you should see fairly consistent results across most modern browsers. Due to the sheer number of user agents on the web these days — especially when you factor in mobile — pixel-perfect layouts may not be possible across every platform. That's okay, but do test in as many as you can. Your design should work in at least IE9+ and the latest Chrome, Firefox, iOS and Android browsers (run by over 90% of the population).

We ask that you submit original artwork. Please respect copyright laws. Please keep objectionable material to a minimum, and try to incorporate unique and interesting visual themes to your work. We're well past the point of needing another garden-related design.

This is a learning exercise as well as a demonstration. You retain full copyright on your graphics (with limited exceptions, see [submission guidelines](#)), but we ask you release your CSS under a Creative Commons license identical to the one on this site so that others may learn from your work.

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You may modify the style sheet in any way you wish, but not the HTML. This may seem daunting at first if you've never worked this way before, but follow the listed links to learn more, and use the sample files as a guide.

Download the sample HTML and CSS to work on a copy locally. Once you have completed your masterpiece (and please, don't submit half-finished work) upload your CSS file to a web server under your control. Send us a link to an archive of that file and all associated assets, and if we choose to use it we will download it and place it on our server.

Next Designs >
View All Designs

View This Design's CSS
CSS Resources
FAQ
Submit a Design
Translations

Select a Design

- Fountain Kiss by Jeremy Carlson
- A Robot Named Jimmy by mltmedia
- Verde Moderna by Dave Shea
- Under the Seal by Eric Stoltz
- Make 'em Proud by Michael McGahon and Scotty Reilsnyder
- Orchid Beauty by Kevin Addison
- Oceanscape by Justin Gray
- CSS Co., Ltd. by Benjamin Klemm

Archives

- Next Designs >
- View All Designs

Resources

- View This Design's CSS
- CSS Resources
- FAQ
- Submit a Design
- Translations

SEE <http://www.csszengarden.com>



Style: local definition

```
<html><head>
```

```
</head><body>
```

```
<h1 style="color:blue;">primo capitolo</h1>
```

nel mezzo del cammin di nostra vita

```
<h1 style="color:blue;">secondo capitolo</h1>
```

mi ritrovai per una selva oscura

```
<h1 style="color:blue;">terzo capitolo</h1>
```

che la diritta via m'era smarrita

```
</body></html>
```



Style: definition of a page style

```
<html><head>
```

```
<style>
```

```
h1 {color:blue;}
```

```
</style>
```

```
</head><body>
```

```
<h1>primo capitolo</h1>
```

```
nel mezzo del cammin di nostra vita
```

```
<h1>secondo capitolo</h1>
```

```
mi ritrovai per una selva oscura
```

```
<h1>terzo capitolo</h1>
```

```
che la diritta via m'era smarrita
```

```
</body></html>
```



Style: definition of a shared style

```
<html>
```

```
<head>
```

```
<link rel="StyleSheet" type="text/CSS" href="../common/lodeStyles.css" >
```

```
</head>
```

```
<body>
```

```
<h1>primo capitolo</h1>
```

nel mezzo del cammin di nostra vita

```
<h1>secondo capitolo</h1>
```

mi ritrovai per una selva oscura

```
<h1>terzo capitolo</h1>
```

che la diritta via m'era smarrita

```
</body></html>
```



Shared style

Authors can also use the LINK element to apply an external style sheet.

REL=StyleSheet specifies a persistent or preferred style while

REL="Alternate StyleSheet" defines an alternate style.

A persistent style is one that is always applied when style sheets are enabled

The absence of the TITLE attribute indicates a persistent style.

A preferred style is one that is automatically applied.

The combination of REL=StyleSheet and a TITLE attribute specifies a preferred style. Authors cannot specify more than one preferred style.

An alternate style is indicated by REL="Alternate StyleSheet".

The user could choose to replace the preferred style sheet with an alternate one, though current browsers generally lack the ability to choose alternate styles.



Shared style

A single style may also be given through multiple style sheets:

```
<LINK REL=StyleSheet HREF="basics.css"
  TITLE="Contemporary" TYPE="text/css">
<LINK REL=StyleSheet HREF="tables.css"
  TITLE="Contemporary" TYPE="text/css">
<LINK REL=StyleSheet HREF="forms.css"
  TITLE="Contemporary" TYPE="text/css">
```

In this example, three style sheets are combined into one "Contemporary" style that is applied as a preferred style sheet.

To combine multiple style sheets into a single style, each style sheet's LINK must use the same TITLE.

Example of external style

```
<HTML>
  <HEAD>
    <TITLE>Hello World</TITLE>
    <link rel="stylesheet"
      href="hello.css"
      type="text/css">
  </HEAD>
  <BODY>
    <H1>Hello World!</H1>
    <p>Usiamo i CSS</p>
  </BODY>
</HTML>
```

```
<HTML>
  <HEAD>
    <TITLE>Hello World</TITLE>
    <style type="text/css">
      @import url(hello.css);
    </style>
  </HEAD>
  <BODY>
    <H1>Hello World!</H1>
    <p>Usiamo i CSS</p>
  </BODY>
</HTML>
```

Example of internal style

```
<HTML>
  <HEAD>
    <TITLE>Hello World</TITLE>
    <style type="text/css">
      BODY { color: red }
      H1 { color: blue }
    </style>
  </HEAD>
  <BODY>
    <H1>Hello World!</H1>
    <p>Usiamo i CSS</p>
  </BODY>
</HTML>
```

```
<HTML>
  <HEAD>
    <TITLE>Hello World</TITLE>
  </HEAD>
  <BODY style="color: red">
    <H1 style="color: blue">
      Hello World!</H1>
    <p>Usiamo i CSS</p>
  </BODY>
</HTML>
```



Formatting elements

color:*color*

background-color:*color*

background-image:*uri*

font-family:name

font-size:xx-small|x-small|small|medium|large|x-large|xx-large|
larger|smaller|*absoluteSize*|*relativeSize*|*percentage*|*length*

font-style:normal|italic

font-weight:bold|bolder|lighter|normal|100|200|...|800|900

Font types

Font con grazie
(o serif)

→ ABCIMN abcimn 1234 Times Roman

Font senza grazie
(o sans serif)

→ ABCIMN abcimn 1234 Arial

Font monospaziato

→ ABCIMN abcimn 1234 Courier

Font calligrafico
(o script)

→ *ABCIMN abcimn 1234 Edwardian*

Font decorativo
(o fantasy)

→ **ABCIMN abcimn 1234 Sand** Proportional
Monospace

Example of multiple declaration:

p {font-family: Verdana, Helvetica, sans-serif;}



ANY FONT YOU LIKE

```
@fontface {  
font-family: 'Museo';  
src: url('/fonts/museo.otf') format ('opentype');
```


Absolute colors

Also using hex

#RRGGBB

Or

rgb(rosso,verde,blu)

	black - nero		green - verde
	silver - argento		lime - verde chiaro
	gray - grigio		olive - oliva
	white - bianco		yellow - giallo
	maroon - marrone		navy - blu scuro
	red - rosso		blue - blu
	purple - viola		teal - verde acqua scuro
	fuchsia - fucsia		aqua - verde acqua

	background - il colore di sfondo del desktop
	buttonFace - il colore di sfondo dei pulsanti
	buttonText - testo dei pulsanti
	captionText - testo delle etichette
	grayText - testo disabilitato

System properties colors



RGBA AND OPACITY

```
rgba: (200, 30 30, 0.2);  
opacity: 0.5;
```


GRADIENTS

```
-webkit-gradient(linear, 0% 0%, 0% 90%, from(rgba(28, 91, 155, 0.8)),  
to(rgba(108, 191, 255, .9)));
```

Length units

ABSOLUTE LENGTH

International System

cm *centimetrs*

mm *millimetrs*

anglosaxon units

in *inch*

pt *point: 1/72 inch*

pc *pica: 12 point = 1/6 inch*

System dependent:

px *pixel*

RELATIVE LENGTH:

em *height of element font*

ex *extended height of element
font*



Formatting elements

line-height:normal|*length*|*percentage*

text-align:left|center|right|justify

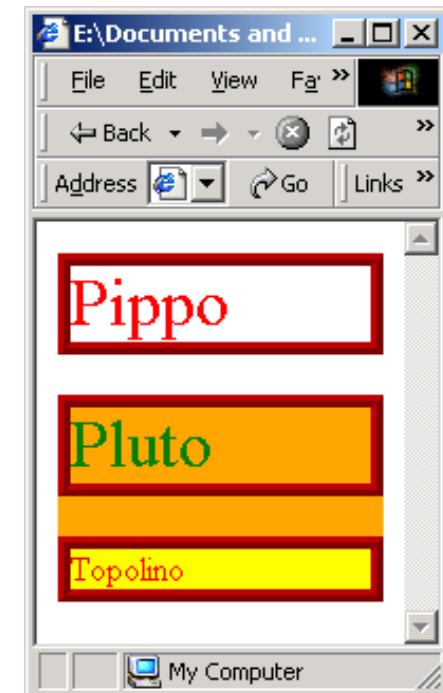
text-decoration:blink|line=through|overline|underline

text-indent:*length*|*percentage*

text-transform:none|capitalize|uppercase|lowercase

Styles cascade

```
<HTML>
<HEAD>
  <STYLE TYPE="text/css">
    p {font-size:24pt;color:green;
      border-width:thick;border-style:ridge;
      border-color:red}
    p.red {color:red}
  </STYLE>
</HEAD>
<BODY>
  <p class="red">Pippo</p>
  <div style="background:orange ">
    <p>Pluto</p>
    <p class="red" style="font-size:12pt;
      background:yellow">Topolino</p>
  </div>
</BODY>
```



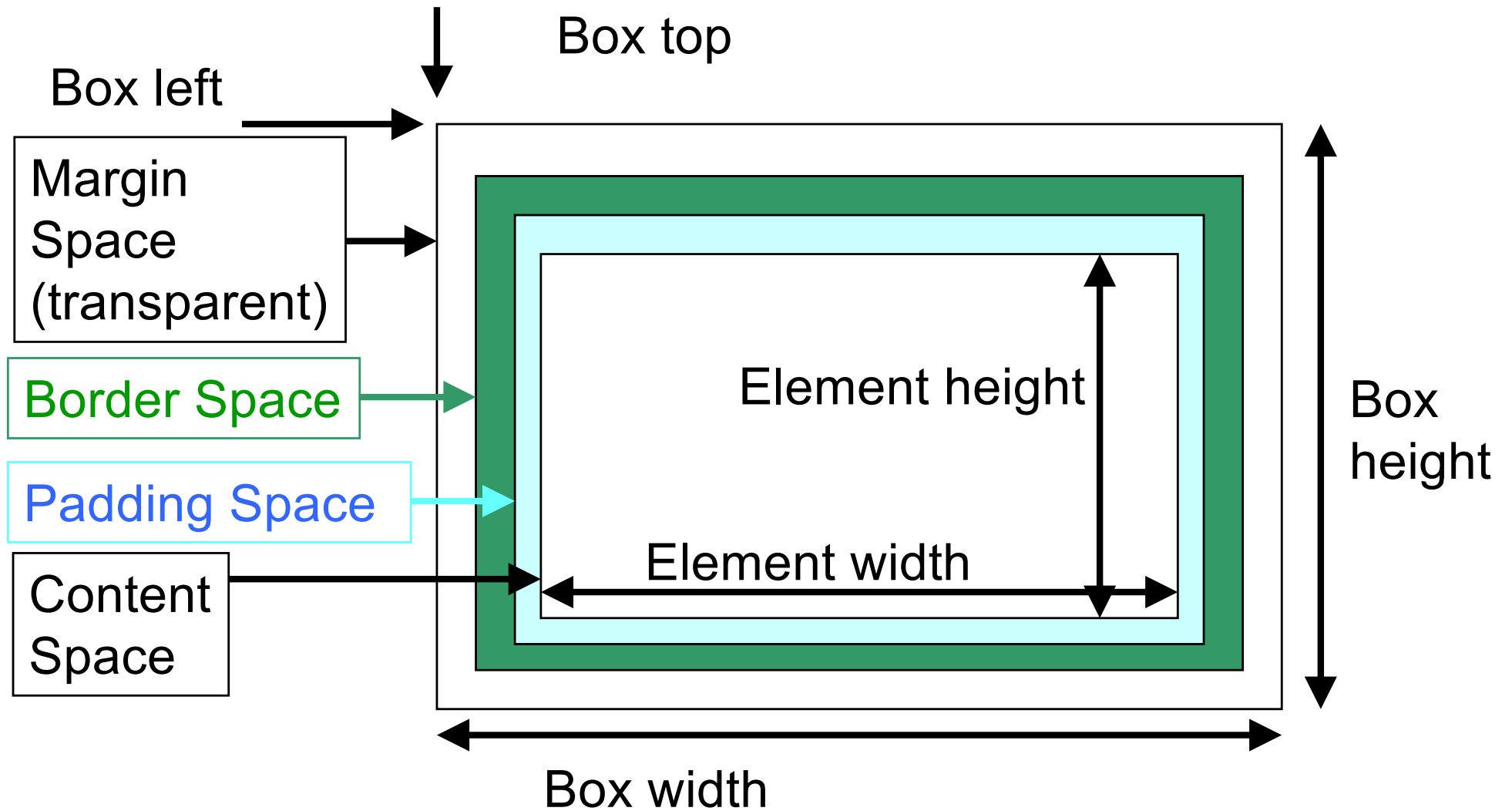


The !important clause

!important

Wins over the other clauses

Formatting elements





Formatting elements

border-bottom-width, border-top-width,
border-right-width, border-left-width: thin|medium|thick|n

border-color: *color*

border-style: double|groove|none|inset|outset|ridge|solid

border-width: thin|medium|thick|*length*

margin: *thickness*

margin-bottom, margin-left, margin-right, margin-top : *thickness*

padding : *thickness*

padding-bottom, padding-left, padding-right, padding-top : *thickness*



BORDER RADIUS

```
-moz-border-radius: 20px;  
-webkit-border-radius: 20px;  
border-radius: 20px;
```



BORDER IMAGE

```
-moz-border-images: url(/images/border-image.png) 5 repeat;  
-webkit-border-images: url(/images/border-image.png) 5 repeat;  
-moz-border-images: url(/images/border-image.png) 5 repeat;
```

Formatting elements - lists

line-style:decimal|lower-alpha|lower-roman|upper-alpha|upper-roman

line-style:circle|disc|square

Grouping

```
H1 { font-family: sans-serif }  
H2 { font-family: sans-serif }  
H3 { font-family: sans-serif }
```

is equivalent to

```
H1, H2, H3 { font-family: sans-serif }
```

Advanced: hierarchical selectors

Adjacency selector `H1+H2 {color:blue}`

Blocks H1 and H2 are consecutive

Father-son selector `BODY > P {color:red}`

Paragraph immediately contained in the BODY

Attribute selector `P[ALIGN]{color:red}`

Selects only aligned paragraphs <P ALIGN=...>

`P[ALIGN="left"]{color:red}`

Selects only left aligned paragraphs <P ALIGN="left">

`*[ALIGN="left"]{color:red}`

Selects any left aligned component ALIGN="left"

Advanced: pseudo elements

Pseudo-elements

P:first-letter

P:first-line

Pseudo-classes

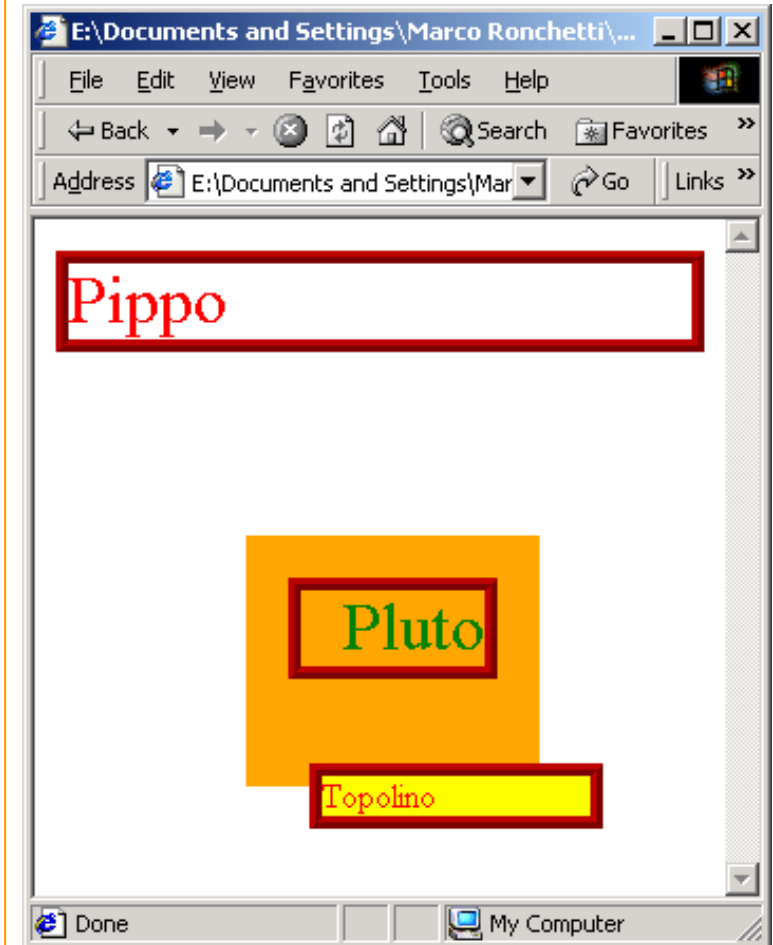
A:link *unvisited anchors*

A:active *anchors about to be visited*

A:visited *visited anchors*

Positioning examples: CSS-P

```
<HTML>
<HEAD>
  <STYLE TYPE="text/css">
    #aposition{position:relative;left:30;top:20}
    a {color:red}
    p {font-size:24pt;color:green;border-width:thick;
      border-style=ridge;border-color=red}
    p.red {color:red}
  </STYLE>
</HEAD>
<BODY>
  <p class="red">Pippo</p>
  <div style="background:orange;
    position:absolute;left:100;top:150">
    <p style="padding-left:20;margin:20">Pluto</p>
    <span id="aposition">
      <p class="red" style="font-size:12pt;
        background-color:yellow">Topolino</p>
    </span>
  </div>
</BODY>
</HTML>
```





Positionable Elements – CSS/P

Type of position specification:

position:absolute|relative

Position specification:

top:*size*

left:*size*

dimension specification:

width:*size*

height:*size*

Visibility specification:

visibility:hidden|inherit|show



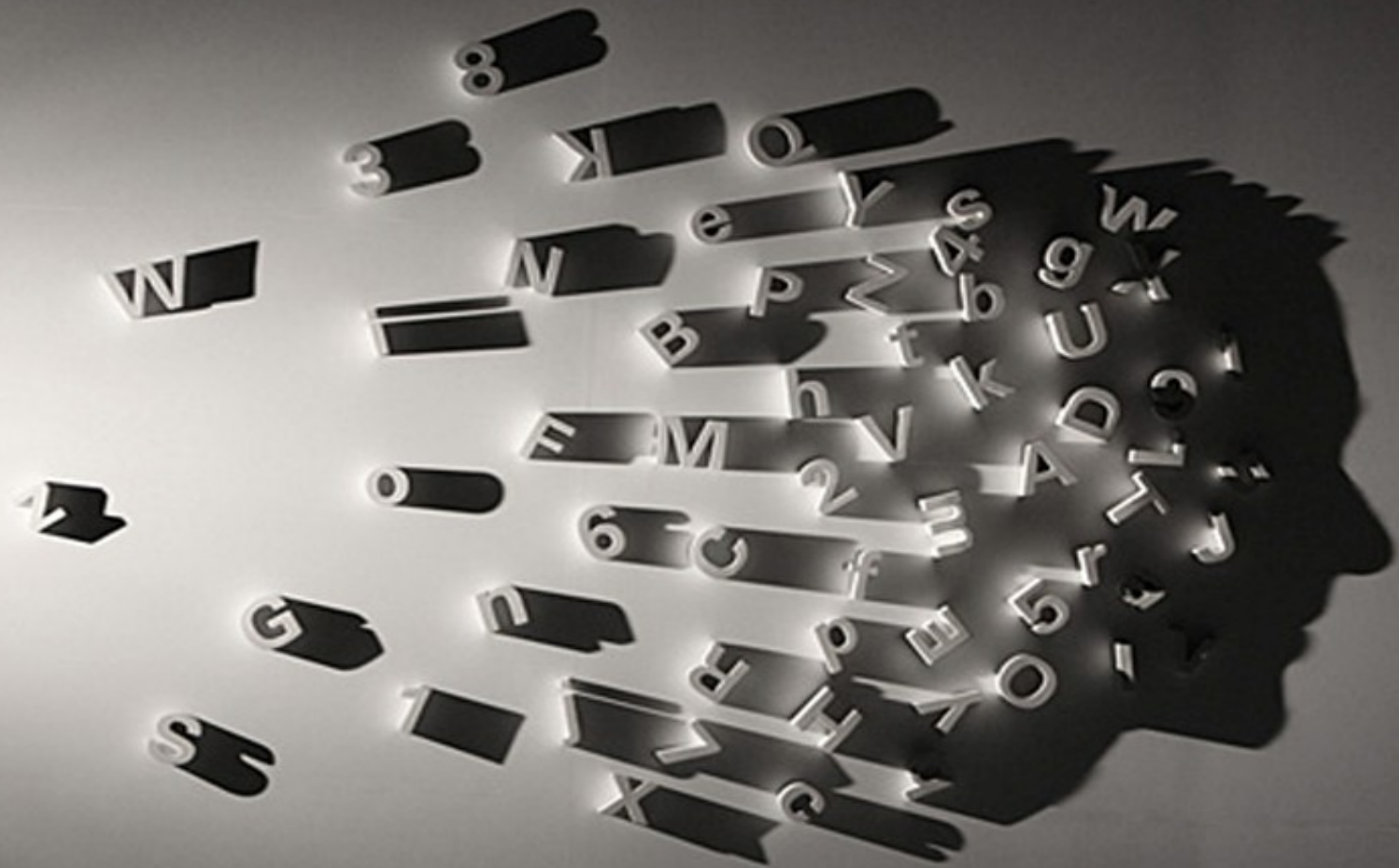
Positionable Elements – CSS/P

Clip:`rect(top right bottom left)`

Clip an element (leaving it in place)

z-index:`n`

Decides the superposition ranking



BOX AND TEXT SHADOW

```
-moz-box-shadow: 10px 10px 25px #ccc;  
-webkit-box-shadow: 10px 10px 25px #ccc;  
box-shadow: 10px 10px 25px #ccc; text-  
shadow: 10px 10px 25px #ccc;
```



TRANSFORM

`-webkit-transform: rotate(45deg) ;`

TRANSITIONS

```
div { opacity: 1; -webkit-transition: opacity 1s linear; }  
div:hover { opacity: 0; }
```



MUCH MORE

Multiple Background Images

Gradient Borders

Columns Support

Masking Text Overflow



A good tutorial

<https://www.w3schools.com/css/default.asp>