

CSS / CSS3

Week 03

TCNJ Dynamic web

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How to Write CSS

Internal Style Sheet

```
<head>
```

```
<style type="text/css">
```

```
body {margin : 0px; }
```

```
</style>
```

```
</head>
```

External Style

```
<head>
```

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

Style.css

```
body { margin:0px; }
```

```
</head>
```

How to Write CSS

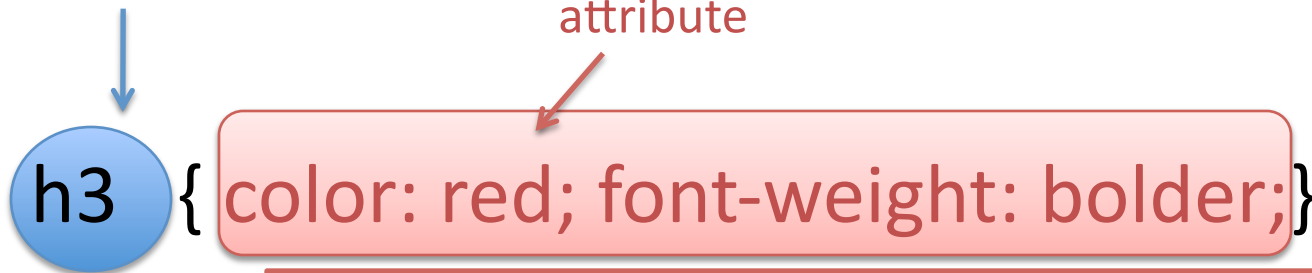
Inline Style

```
<body style="margin : 0px;">
```

```
<h1 style="border-style: double; color:  
fuchsia; text-align: center">Hello</h1>
```

CSS Selectors

selector



```
<h3>I am red </h3>
```

ID selector

div# Menu { border-width: 2px; }

```
<div id="Menu">...</div>
```

Class selector

h3.FancyTitle { color: red; font-weight: bolder; }

```
<h3 class="FancyTitle">Hi hello</h3>
```

CSS Selectors

selector



attribute



a: hover { color: red; font-weight: bolder; }

```
<div><a href="#">I am red when you roll over the mouse</a></div>
```

CSS 3 Selector

selector



This is New!



attribute



```
.row: nth-child(even) {background: #dde;}  
.row:nth-child(odd) { background: white; }
```

```
<div class="row"> ... </div>
```

Row 1

Row 2

Row 3

Row 4

CSS 3 Selector

Attribute Selector

`Input [type="text"] { background: #eee; }`

This is New!

attribute

```
<input type="text" name="name"></input>
```

Negation

```
:not(.box) { color: #00c; }
```

Child Selectors

```
h2 :first-child { ... }
```

```
div.text > div { ... }
```

Adjacent Selectors

```
h2 + header { ... }
```

CSS Color

HTML 5 (Also RGB, RGBA, HSLA colors)

```
body { background-color: rgb  
  (177,255,20)}
```

```
body { background-color: rgba  
  (177,255,20, 0.75)}
```

```
body {background-color: hsla  
  (128, 75%, 33% 1.00); }
```

HTML (Hexademical Colors, Color Name, Opacity)

```
body { background-color:  
  #E0E0E0; }
```

```
body { background-color: red;}
```

```
body { Opacity : 0.6;}
```

Browsers...agggh!

webkit

Safari, Chrome
only

Ex)

```
-webkit-text-  
stroke: 1px  
#cc0000;
```

Mozilla

Firfox only

Ex)

```
-moz-linear-  
gradient(left,  
#fff, #000);
```

Microsoft

Firfox only

Ex)

filter:

```
progid:DXIma  
geTransform.  
Microsoft.gra  
dient  
(startColorstr  
='#ffffff',  
endColorstr='  
#000000');
```

CSS3 Only

Shadows

text-shadow: h-shadow v-shadow blur(op) color(op);

Ex) text-shadow: 0px 5px 0px rgba(64, 64, 64, 0.5);

box-shadow: h-shadow v-shadow blur(op) spread(op)
color(op) inset(op);

box-shadow: 1px 2px 9px rgba(0, 0, 128, 0.25);



Shadows example

<http://slides.html5rocks.com/#css-shadow>

CSS3 webkit

Textstroke

```
-webkit-text-stroke: 1px  
  #cc0000;  
-webkit-text-fill-color: #FFFFFF;
```

Gradients

```
background: -webkit-gradient  
  (linear, left top, left bottom,  
  from(#00abeb),  
  to(white),  
  color-stop(0.5, white),  
  color-stop(0.5, #66cc00))
```



```
background: -webkit-gradient  
  (radial, 430 50, 0, 430 50, 200,  
  from(red), to(#000))
```



CSS - Fonts

```
font-family: "Times New Roman",  
Times, serif;
```

relative size em

```
font-size: 1em;
```

absolute size px

```
font-size: 12px;
```

```
font-size: large;
```

```
font-size: 200%;
```

```
font-weight: bold;
```

```
font-style: italic;
```

```
text-align:center;
```

Capitalizing

```
text-transform: uppercase;
```

```
text-decoration: underline;
```

```
text-decoration: none;
```

(Not to underline when linked)

Web safe fonts

Windows fonts / Mac fonts / Font family

Normal style	Bold style
Arial, Arial, Helvetica, <i>sans-serif</i>	Arial, Arial, Helvetica, <i>sans-serif</i>
Arial Black, Arial Black, Gadget, <i>sans-serif</i>	Arial Black, Arial Black, Gadget, <i>sans-serif</i>
Comic Sans MS, <i>Comic Sans MS⁵, cursive</i>	Comic Sans MS, <i>Comic Sans MS⁵, cursive</i>
Courier New, <i>Courier New, monospace</i>	Courier New, <i>Courier New, monospace</i>
Georgia ¹ , <i>Georgia, serif</i>	Georgia ¹ , <i>Georgia, serif</i>
Impact, Impact⁵, Charcoal⁶, <i>sans-serif</i>	Impact, Impact⁵, Charcoal⁶, <i>sans-serif</i>
Lucida Console, <i>Monaco⁵, monospace</i>	Lucida Console, <i>Monaco⁵, monospace</i>
Lucida Sans Unicode, <i>Lucida Grande, sans-serif</i>	Lucida Sans Unicode, <i>Lucida Grande, sans-serif</i>
Palatino Linotype, Book Antiqua ³ , <i>Palatino, serif</i>	Palatino Linotype, Book Antiqua ³ , <i>Palatino, serif</i>
Tahoma, <i>Geneva, sans-serif</i>	Tahoma, Geneva, <i>sans-serif</i>
Times New Roman, <i>Times New Roman, Times, serif</i>	Times New Roman, <i>Times New Roman, Times, serif</i>
Trebuchet MS ¹ , <i>Trebuchet MS, sans-serif</i>	Trebuchet MS ¹ , <i>Trebuchet MS, sans-serif</i>
Verdana, <i>Verdana, Geneva, sans-serif</i>	Verdana, Verdana, Geneva, <i>sans-serif</i>
Symbol ¹ , <i>Symbol (Symbol², Symbol²)</i>	Symbol ¹ , <i>Symbol (Symbol², Symbol²)</i>
Webdings ² , <i>Webdings (Webdings², Webdings²)</i>	Webdings ² , <i>Webdings (Webdings², Webdings²)</i>
Wingdings, <i>Zapf Dingbats (Wingdings², Zapf Dingbats²)</i>	Wingdings ² , <i>Zapf Dingbats (Wingdings², Zapf Dingbats²)</i>
MS Sans Serif ⁴ , <i>Geneva, sans-serif</i>	MS Sans Serif⁴, Geneva, <i>sans-serif</i>
MS Serif ⁴ , <i>New York⁶, serif</i>	MS Serif⁴, New York⁶, <i>serif</i>

<http://www.ampsoft.net/webdesign-l/WindowsMacFonts.html>

What is new in CSS 3?

Web Fonts

Use @fontface

```
@font-face {  
  font-family: DeliciousRoman;  
  src: url(Delicious-Roman.otf);  
  font-weight:400;  
}
```

Then just use it like any other font in any other style rule.

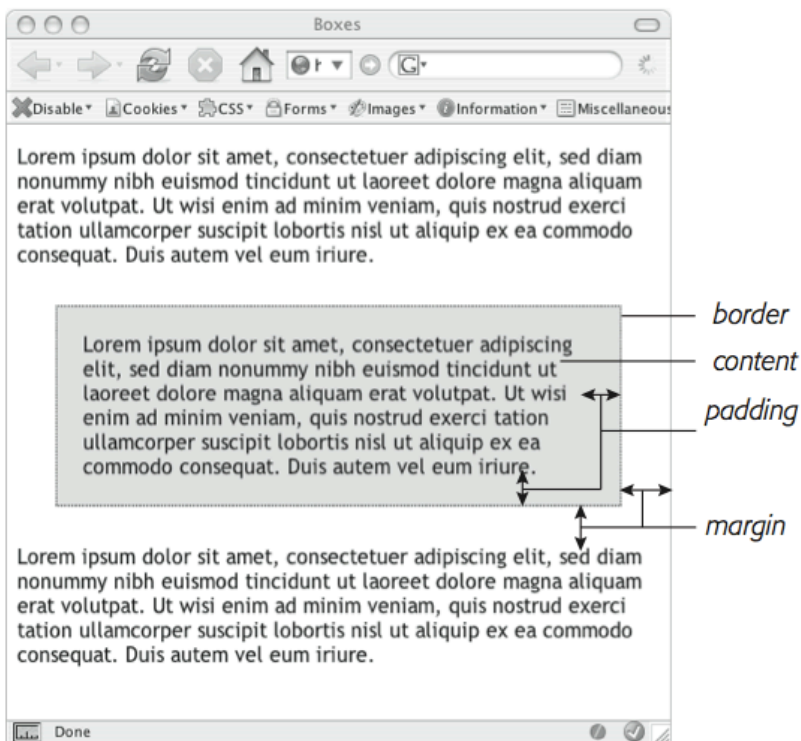
```
p {  
  font-family: DeliciousRoman,  
  Helvetica, Arial, sans-serif;  
}
```

Web font Sources

- Free
 - (Google Web fonts, Squirrel, Cufon fonts)
- Commercial
 - (Typekit, FontDeck, Typotheque, Webtype, Kernest)
- You can upload your own
 - (if you have the right permission)

CSS Margin, Padding, Border

Margin, Padding, Border



code

margin : top right bottom left ;

margin : 0px 0px 10px 10px ;

padding : top right bottom left ;

padding : 0px 0px 10px 10px ;

border: borderwidth style color;

border : 1px solid #888;

CSS Borders

CSS : Border Style

```
h1 {  
  border-style: solid dotted  
  dashed double;  
  border-width: 3px;  
}
```

CSS border property example

CSS3 only : Border image

```
border-image: source slice width  
  outset repeat;
```

```
border-image: url(border.png) 27  
  27 27 27 stretch stretch;
```



http://www.w3schools.com/cssref/css3_pr_border-image.asp

CSS Borders

CSS3 only : Rounded corners

`border-radius: 15px;`

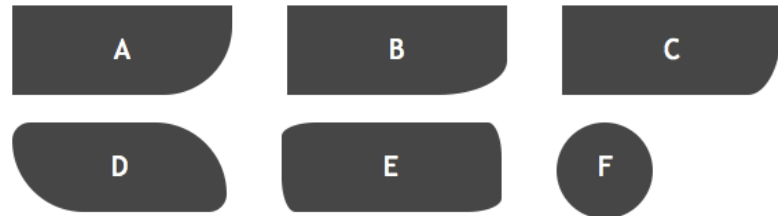
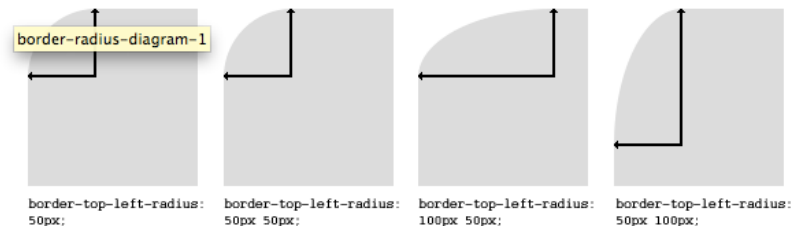
`-moz-border-radius: 15px;`

border-radius :

`border-bottom-left-radius, border-bottom-right-radius,
border-top-left-radius, border-top-right-radius`

-moz-border-radius :

`border-top-left-radius -moz-border-radius-topleft`
`border-top-right-radius -moz-border-radius-topright`
`border-bottom-right-radius -moz-border-radius-bottomright`
`border-bottom-left-radius -moz-border-radius-bottomleft`



<http://www.css3.info/preview/rounded-border/>

CSS Background Image

Background Image

`background-image:url(photo.jpg);`

Background Image Position

`background-position: left top;`

or

`background-position: 10px 50%;`

Background Repeat

`background-repeat: no-repeat;`

Background size

`Background-size:auto;`

`background-size: 50% 25%;`

`background-size: contain;`

`background-size:cover;`

CSS Layout

Aligning Center

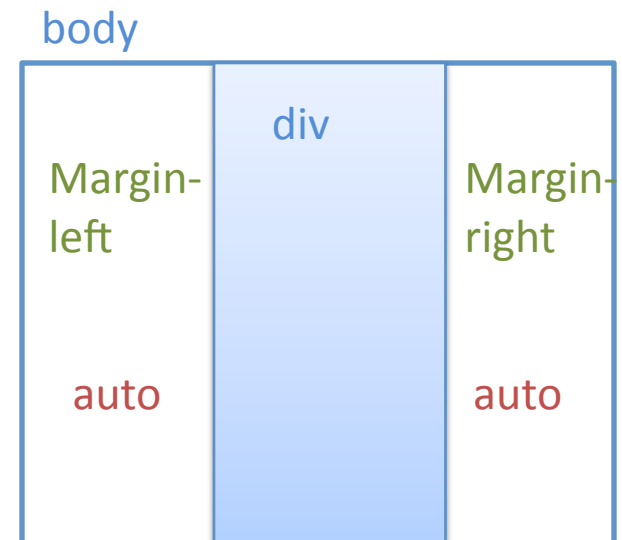
*From CSS

```
body {width:100% ;  
height:100%}
```

```
div {width1024px;  
height:100%;  
margin-left:auto;  
margin-right:auto;}
```

*From HTML

```
<body>  
  <div>  
  </div>  
</body>
```



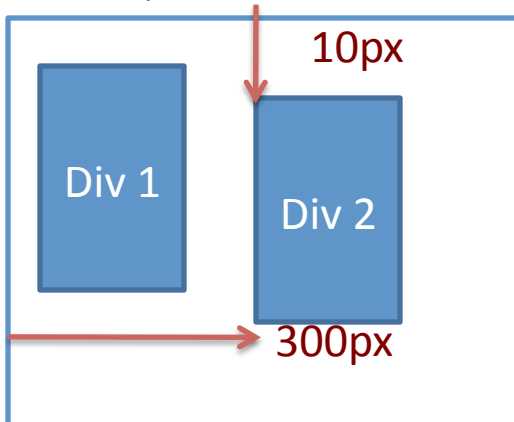
CSS Positioning

Default is static

Methods: Static, absolute, relative, fixed

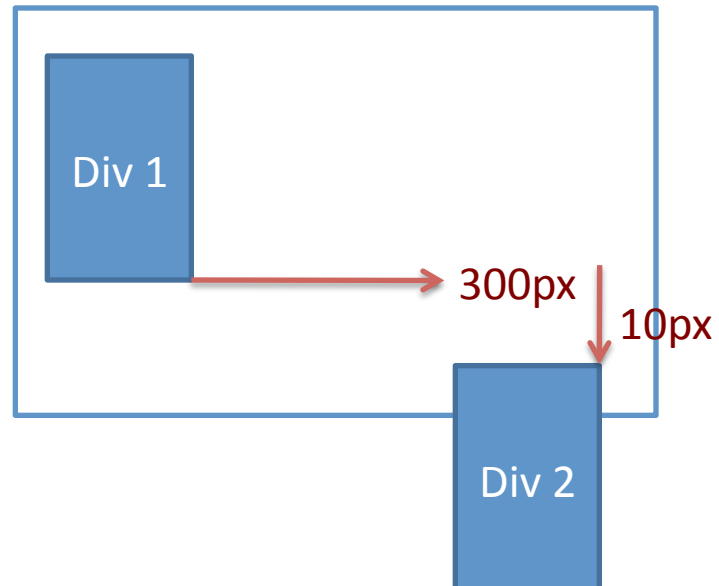
Position : Absolute

```
Div#1{  
Top:10px;  
left:10px;  
}  
Div #2{  
Position:absolute;  
Top:10px;  
Left:300px;
```



Position : Relative

```
Div#1{  
Top:10px;  
left:10px;  
}  
Div #2{  
Position:relative;  
Top:10px;  
Left:300px;
```



CSS Layout - Float

Floating

Default is none

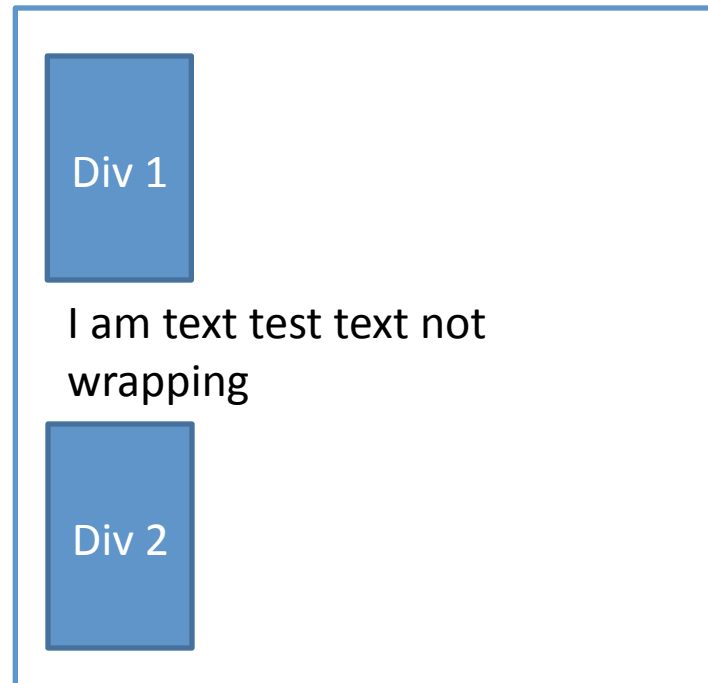
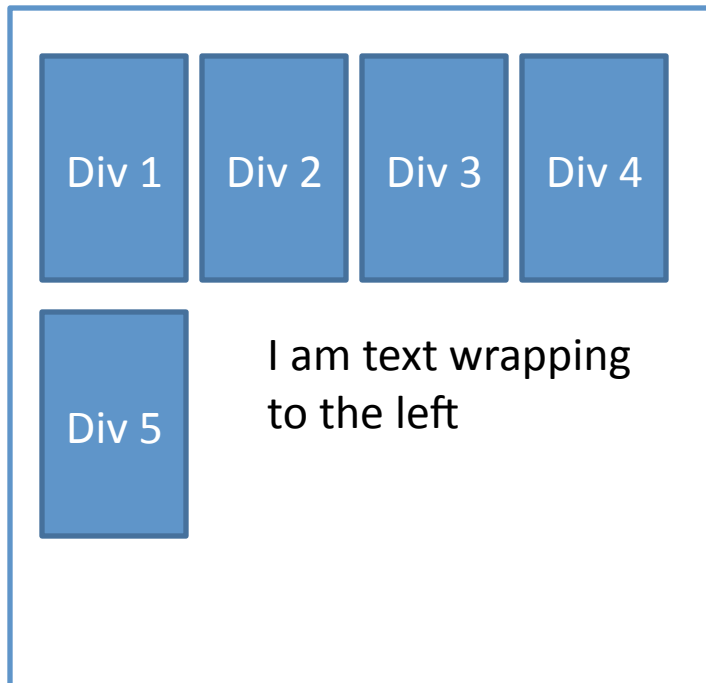
Left, right, none; inherit

`float:left;`

Wraps the content

`float:none;`

Default. No wrap

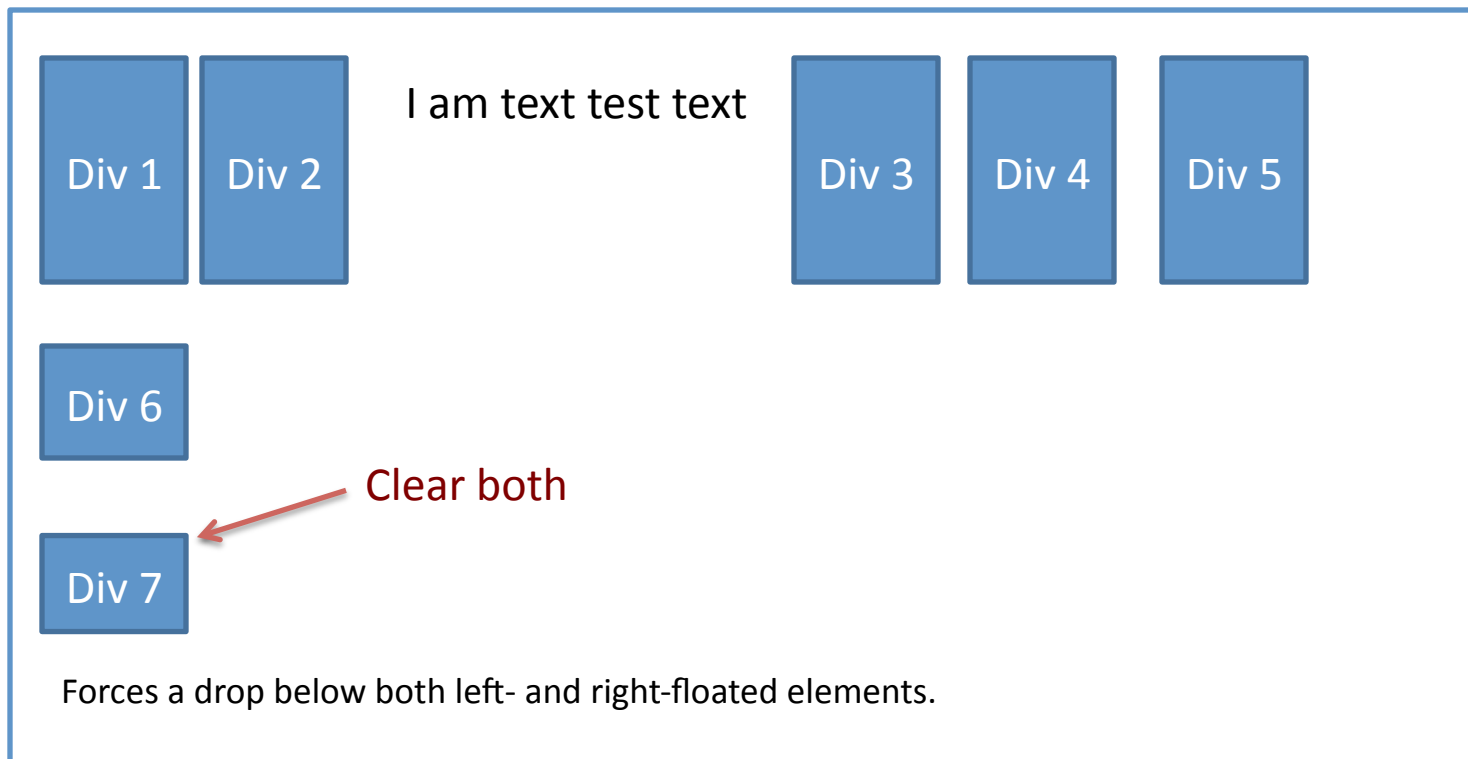


CSS Layout - Float

Stop floating

Clear:both;

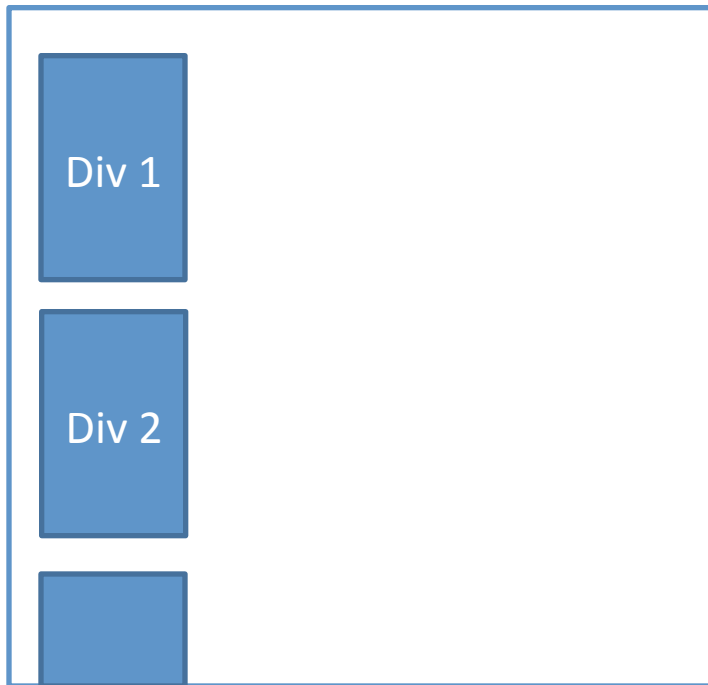
Stop the float



CSS Layout - Overflow

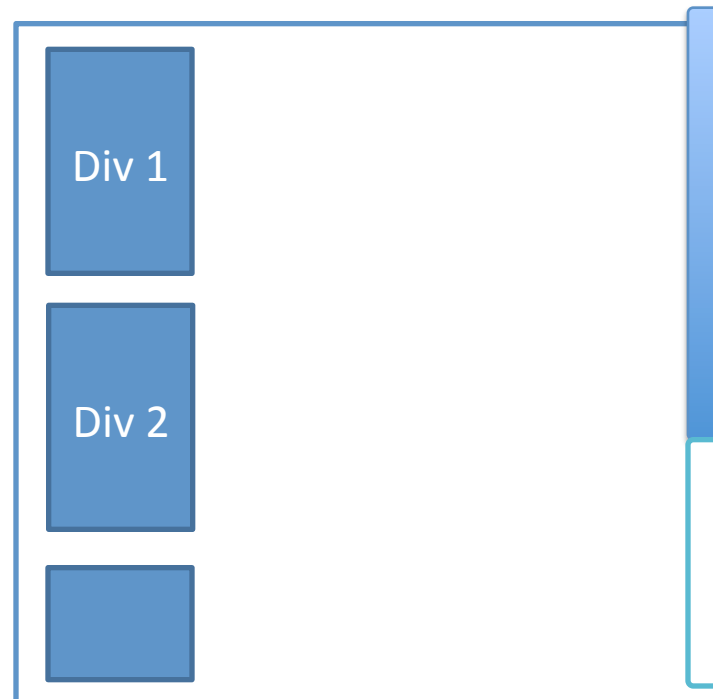
Overflow default is visible

Overflow : hidden



Cut up

Overflow : scroll



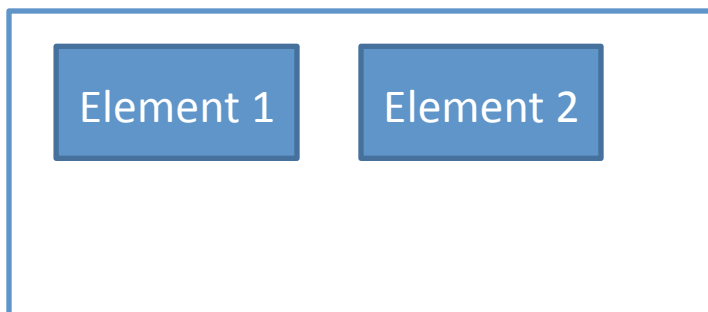
Adds a scroll bar

CSS Layout - Display

Display :inline

Default Inline Elements :

, <a>, <label>,
<input>, ,
and

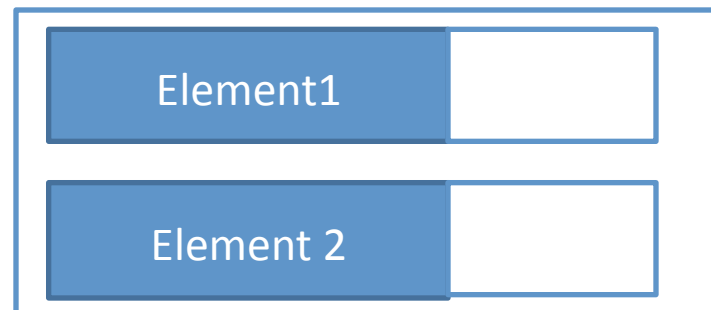


- Begin on the same line
- Height, line-height and top and bottom margins can't be changed
- Width is as long as the text/image and can't be manipulated

Display :block;

• Default Block Elements :

<div>, <p>, <h1>, <form>,
 and



- Always begin on a new line
- Height, line-height and top and bottom margins can be manipulated
- Width defaults to 100% of their containing element, unless a width is specified

CSS - Align

Aligning

Text-align:left;

Text text text text text text text
text Text text text text text text
text text

Text text text text text text text
text Text text text text text text
text text Text text text text text
text text text
Text text text text text text text

Text-align:center;

Text text text text text text text
text Text text text text text text
text text

Text text text text text text text
text Text text text text text text
text text Text text text text text
text text text
Text text text text text text text

CSS3 only – Transform 2D

transform

```
transform: scale(1.3);
```

```
transform-origin: bottom left;
```

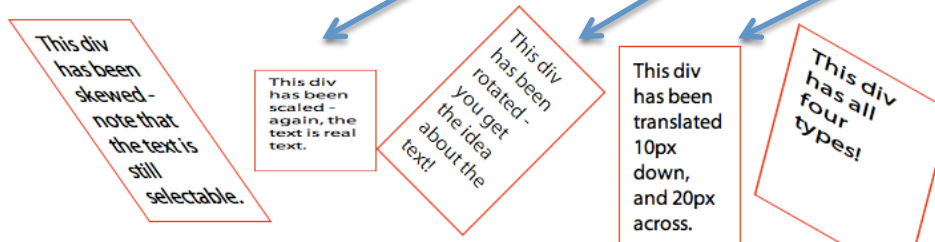
```
#skew {transform:skew(35deg);}
```

```
#scale {transform:scale(1,0.5);}
```

```
#rotate {transform:rotate(45deg);}
```

```
#translate {transform:translate(10px, 20px);}
```

```
#rotate-skew-scale-translate  
{transform:skew(30deg) scale(1.1,1.1)  
rotate(40deg) translate(10px, 20px);}
```



<http://css3.bradshawenterprises.com/transforms/>

CSS 2D Transforms <http://www.w3.org/TR/CSS3-2d-transforms/>

CSS 3D Transforms <http://www.w3.org/TR/CSS3-3d-transforms/>

CSS3 only – Transform 3D

```
#transDemo4 div {transition:all 2s ease-in-out;perspective:800;perspective-origin: 50% 100px;}
```

```
#transDemo4:hover #rotateX {transform:rotateX(180deg);}
```

```
#transDemo4:hover #rotateY {transform:rotateY(180deg);}
```

```
#transDemo4:hover #rotateZ {transform:rotateZ(180deg);}
```

CSS 2D Transforms <http://www.w3.org/TR/CSS3-2d-transforms/>

CSS 3D Transforms <http://www.w3.org/TR/CSS3-3d-transforms/>

CSS3 only - Transition

Transition : transition-property , transition-duration ,
transition-timing-function, transition-delay

transition: transform **0.2s ease-in-out;**

-webkit-transition: all 1s ease-in-out;

-moz-transition: all 1s ease-out;

-o-transition: all 1s linear;

-ms-transition: all 1s ease-in-out;

transition: all 1s ease-in-out;

<http://css3.bradshawenterprises.com/transitions/>

CSS References

CSS Sample (CSS Zen Garden)

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

CSS Generator

- <http://css3generator.com/>

CSS Tricks

- <http://css-tricks.com/animate-to-an-inline-style/>

CSS Validation

- <http://jigsaw.w3.org/css-validator/>

Textbook

CSS 3 for Web Designers - Dan Cederholm

http://www.teaching.jeanhochu.com/tcnj/web2/notes/textbooks/html5_css3/02_CSS3forWebDesigners.pdf

CSS3 the missing Manual

http://teaching.jeanhochu.com/tcnj/web2/notes/textbooks/html5_css3/CSS_TheMissingManual.pdf