

CSS

- CSS = Cascading Style Sheets
- format HTML elements (tags)
 - size, color, position, attributes, ...
- one place to store all configurations
 - like in work "styles"
- set of rules

```
selectorattributesvaluesselector{
attribute: value;
```

Syntax

```
/*comment*/
/*even
more
comments
*/
selector{
attribute: value;
}
```

```
/*comment*/
/*even
more
comments
*/
body{
color: red;
}
```

CSS + HTML?

• referencing a CSS file in HTML

```
<html>
    <head>
        ...
        link href="css/style.css" type="text/css" rel="stylesheet">
        ...
        </head>
        <body>
        </body>
        </html>
```

Classes + IDs

```
/*class selector*/
.classname{
    font-size: I 5;
}

/*id selector*/
#idname{
    color: red;
}
```

Basic Selectors

type	description	example
universal selector	- for each html element	/*universal selectors* div{ color:#000; }
class selector	a custom class name can be associatedcan be used as much as needed	/*class selectors* .heading-one{ color: #ff0000; }
universal + class selectors	- apply a class only for special teype of html element (universal selector)	/*universal + class selectors* div.heading{ color: #ff0000; }
id selector	a custom id name can be associatedonly once allowed once per page	/*id selectors* #navigation{ color: #ff0000; }

Combining Selectors

- apply a configuration for different selectors
 - separated with a comma (",")

```
/*combining universal selectors*/
div, h l, h 2 {
    font-family: Verdana;
}

/*combining class selectors*/
.first, .third {
        color: #c0c0c0;
}
.second, .fourth {
        color: #ff0000;
}
```

```
/*combining universal + class
selectors*/
div .first, p .second{
  font-family:Verdana;
}
```

Pseudo Classes

- specify the state or relation to a selector
 - mostly needed for links
- important

link when the link was not been clicked

visited when the link has been clicked

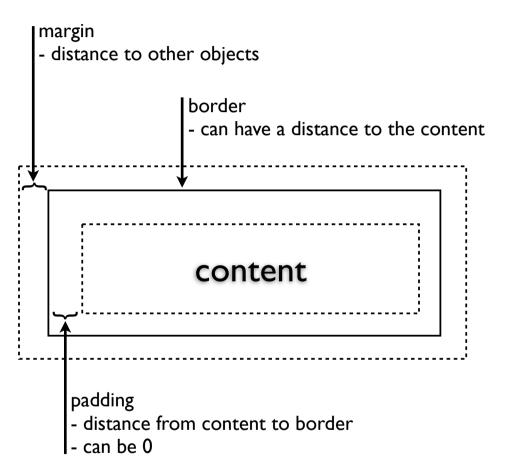
active when the link is clicked

hover when the mouse if over the link

```
/*universal selectors
with pseudo classes*/
a:link{
  color: #000000:
a:visited{
  color: #ff0000;
```

```
/*universal selectors
with pseudo classes*/
a:hover{
  color: #c0c0c0:
a:active{
  color: green;
```

Box Model



Box Model

- class: box
 - box, 200px * 50px, border 1px solid
- class: box2
 - padding: 10 px, box, 200px * 50px, border 1px solid
- class: box3
 - margin: 10 px, box, 200px * 50px, border 1px solid
- what do you see?

 distance from border to outer elements

```
<html lang="en">
<head>
    <meta charset="utf-8" />
    <title>css_03</title>
   <link href="css/css_03.css" rel="stylesheet" type="text/css">
</head>
<body>
    <header id="header">Text</header>
    <div id="content">
        <div id="block1">Text 1</div>
        <div id="block2">Text 2</div>
        <div id="block3">Text 3</div>
        <div id="block4">Text 4</div>
   </div>
    <footer id="footer"></footer>
</body>
</html>
```

```
#header{
    background: #CCC;
}

#content{
    background: #CCC;
    color: #FFF;
}

#block1{
    background: #111;
}

#block2{
    background: #222;
}

#block3{
    background: #333;
}

#block4{
    background: #444;
}
```

Text
Text 1
Text 2
Text 3
Text 4

- increase the distance between the header and the content
 - increase the margin to the bottom
 - margin: 0 0 50px 0;
 - top left bottom right
- compare: what happens when use padding?

```
#header{
                                50px to bottom
    background: #CCC;
    margin: 0 0 50px 0;
                                                           Text 1
#content{
                                                           Text 2
    background: #CCC;
                                                           Text 3
    color: #FFF;
                                                           Text 4
#block1{
    background: #111;
#block2{
    background: #222;
#block3{
                                                   12
    background: #333;
```

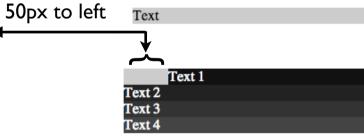
- increase the distance to top, left and right
 - margin: 25px, 10px, 50px, 10px
 - compare it with padding?

```
25px
#header{
    background: #CCC;
                                              → Text
    margin: 25px 10px 50px 10px;
                                             10<sub>px</sub>
                                                                                                                       I<sub>0px</sub>
                                                                  50px
#content{
                                                 Text 1
    background: #CCC;
                                                 Text 2
    color: #FFF;
                                                 Text 3
                                                 Text 4
#block1{
    background: #111;
#block2{
    background: #222;
#block3{
    background: #333;
                                                             13
#block4{
    background: #444;
```

- #block I: distance to left element
 - left element: #content
 - margin: 50px 0 0 0; or margin-left: 50px;

```
#header{
    background: #CCC;
    margin: 25px 10px 50px 10px;
#content{
    background: #CCC;
    color: #FFF;
#block1{
    background: #111;
   margin-left: 50px;
#block2{
    background: #222;
#block3{
    background: #333;
#block4{
    background: #444;
```

- why grey background?
- compare with padding?



- #block2: distance to bottom element
 - bottom element: #block3
 - margin-bottom: 10px;
 - compare with padding?

