

CSS Basics



ipSpace

CSS 101

Formatting specifications for HTML pages

- Layout and box model
- Visual formatting and effects
- Colors and backgrounds
- Fonts and text
- Tables

CSS Sources

- Inline (<tag style="something">) Exceptions only
- Internal (<style>...</style>) Page-level exceptions
- External (link elements)

```
<!DOCTYPE html>
<html>
<head>
  <link rel="stylesheet" type="text/css"
    href="/css/wiki20.css?207" />
</head>
```

Internal CSS Augmenting External CSS

```
<html>
  <head>
    <title>ipSpace.net by @ioshints</title>
    <link rel="stylesheet" type="text/css"
      href="/css/wiki20.css?207" />
    <style type="text/css">
      .right { text-align: right }
      h1 { display: none; }
      #topTable p { margin: 0 0; }
      #topTable { margin-top: 8px; }
    </style>
  </head>
```

CSS Syntax

```
selector(s) { attribute: value(s); attribute: value(s); } ...
```

Selector:

- Tag name
- Class name (specified with **class** attribute) – element can have multiple classes (their attributes are combined)
- Element ID (specified with **id** attribute)
- Element that has specific attribute(s)
- Pseudo classes (:first-child, :link, :visited, :hover, :active, :focus, :first-line, :first-letter)

```
h1 { font-size: 2em; }
```

```
.editsection { display: none }
```

```
#outer-wrapper { width: 1020px; margin: 0 auto; }
```

```
a[name] { border: none !important; }
```

More Complex Selectors

```
.center * { margin-left: auto; margin-right: auto; }
```

```
a img { border-width:0; }
```

```
a:link, a:visited, a:hover { text-decoration: none; color: inherit; }
```

```
#header h1 { color: #372F2D; }
```

```
.post .post-title h3 { color: #d26400; }
```

```
.post-body a, .post-body a:link {  
  color: #603913; border-bottom: 1px dotted #603913; }
```

```
.post blockquote.code p { margin: 0 0; }
```

Cascading and Inheritance

Cascading:

- User agent declarations (least important)
- User declarations
- Author declarations (CSS, HTML, inline)
- Author important declarations
- User important declaration

Inheritance:

- Some values of child elements are inherited from their ancestors
- Caveat: default values
- Overwrite default values with *inherit* value

CSS Inheritance and Default Values

```

<html>
<head>
  <title>CSS inheritance</title>
  <style>
    div { margin: 0 0; color: blue;
          border: solid 1px black; }
    p   {}
  </style>
</head>
<body>
  <div>
    <p>First paragraph in first DIV</p>
    <p>Second paragraph in first DIV</p>
  </div>
  <div>
    <p>First paragraph in second DIV</p>
    <p>Second paragraph in second DIV</p>
  </div>
</body>

```

First paragraph in first DIV

Second paragraph in first DIV

First paragraph in second DIV

Second paragraph

▼ Styles

element.style {

}

Matched CSS Rules

p { inheritance.html:6

}

p { user agent stylesheet

display: block;

-webkit-margin-before: 1em;

-webkit-margin-after: 1em;

-webkit-margin-start: 0px;

-webkit-margin-end: 0px;

}

Inherited from div

div { inheritance.html:5

color: ■ blue;

}

Overwriting Default Values with *Inherit*

```
<html>
<head>
  <title>CSS inheritance</title>
  <style>
    div { margin: 0 0; color: blue;
          border: solid 1px black; }
    p   { margin: inherit }
  </style>
</head>
<body>
  <div>
    <p>First paragraph in first DIV</p>
    <p>Second paragraph in first DIV</p>
  </div>
  <div>
    <p>First paragraph in second DIV</p>
    <p>Second paragraph in second DIV</p>
  </div>
</body>
```

First paragraph in first DIV
 Second paragraph in first DIV
 First paragraph in second DIV
 Second paragraph in second DIV

▼ Styles

element.style {

}

Matched CSS Rules

p { inheritance.html:6

margin: inherit;

}

p { user agent stylesheet

display: block;

-webkit-margin-before: 1em;

-webkit-margin-after: 1em;

-webkit-margin-start: 0px;

-webkit-margin-end: 0px;

}

Inherited from div

div { inheritance.html:5

color: ■ blue;

}

Selector Specificity

1. Inline style more specific than STYLE tag or CSS
2. Selector with more ID attributes is more specific
3. Selector with more attributes and pseudo-classes is more specific
4. Selector with more elements and pseudo-elements is more specific

#body	>>	body
div#wrapper a	>>	div.wrapper p a:visited
p#title	>>	div.wrapper p
div.wrapper a:visited	>>	div.wrapper p a
div ul li a	>>	a
a:visited	>>	div ul li a

More CSS Samples

▼ Styles + [icon] [icon]

```

element.style {
}

Matched CSS Rules

.post blockquote.cite {
    margin-left: 20px;
    padding-left: 40px;
    line-height: 1.8em;
    font-style: italic;
    ▶ background: url(images/ic20-quote.jpg) no-repeat;
}

.post blockquote {
    ▶ margin: 1em 20px;
}

blockquote {
    display: block;
    -webkit-margin-before: 1em;
    -webkit-margin-after: 1em;
    -webkit-margin-start: 40px;
    -webkit-margin-end: 40px;
}

```

```

Inherited from div.post
.post {
    font-size: 92%;
}

Inherited from div#outer-wrapper
#outer-wrapper {
    text-align: left;
    ▶ font: normal normal 100% Verdana, Sans -;
}

Inherited from body
body {
    color: #372F2D;
    ▶ font: x-small Verdana, Sans Serif;
    font-size: /**/small;
}

```

More CSS Samples

Matched CSS Rules

```
.post .jump-link blog20.css:310
a:visited:hover {
  ▶ border-bottom: 1px solid ■ #736357;
}
```

```
.post .jump-link a:hover { blog20.css:309
  ▶ border-bottom: 1px solid ■ #D26400;
}
```

```
.post .jump-link a:visited { blog20.css:308
  color: ■ #736357;
  ▶ border-bottom: 1px dotted ■ #736357;
}
```

```
.post .jump-link a:link { blog20.css:307
  color: ■ #D26400;
  ▶ border-bottom: 1px dotted ■ #D26400;
}
```

```
a:link, a:visited, a:hover { blog20.css:10
  text-decoration: none;
  color: inherit;
}
```

```
a:link, a:visited, a:hover { blog20.css:10
  text-decoration: none;
  color: inherit;
}
```

```
a:link, a:visited, a:hover { blog20.css:10
  text-decoration: none;
  color: inherit;
}
```

```
a:-webkit-any-link { user agent stylesheet
  color: webkit-link;
  text-decoration: underline;
  cursor: auto;
}
```

Inherited from [div.post](#)

```
.post { blog20.css:135
  font-size: 92%;
}
```

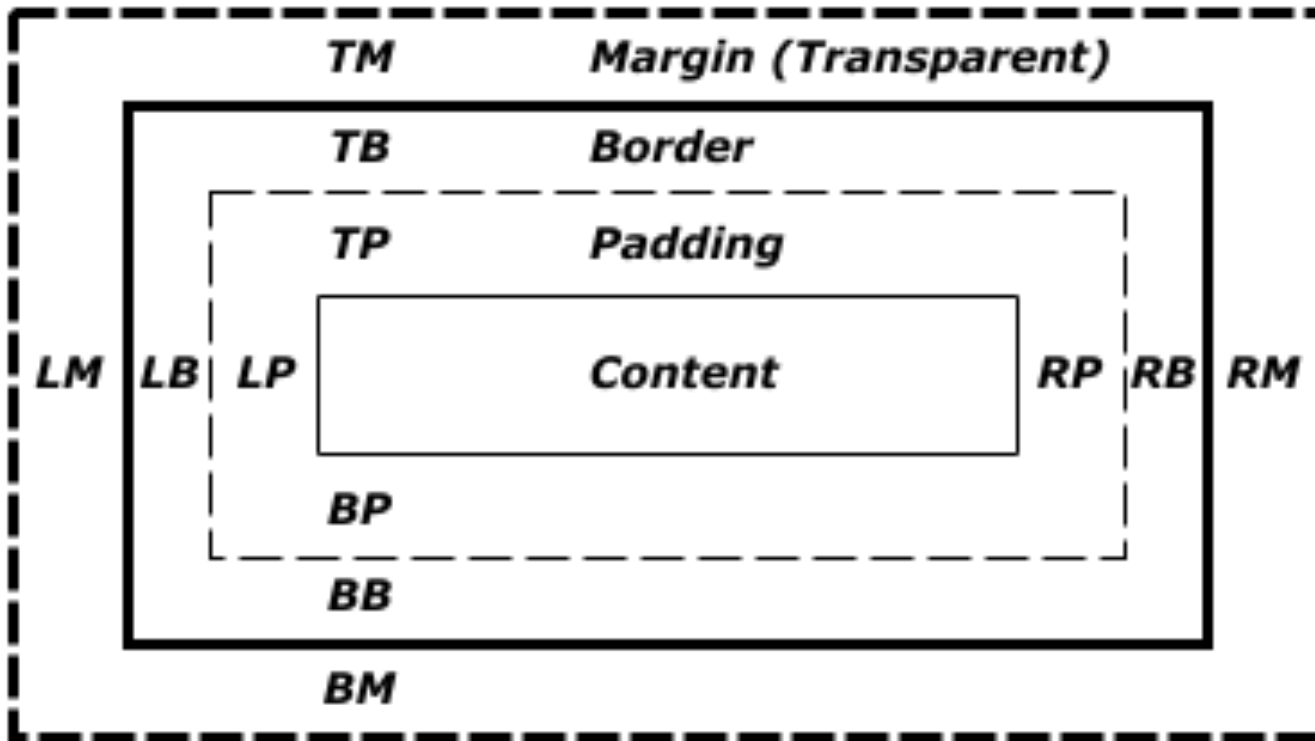
Inherited from [div#outer-wrapper](#)

```
#outer-wrapper { blog20.css:81
  text-align: left;
  ▶ font: normal normal 100% Verdana, Sans-se...
}
```

Formatting Models

block	Element is formatted as a block (box) (ex: P)
inline	Elements that do not generate new blocks (ex: A, SPAN). Inline elements don't have margins.
inline-block	Formatted as block, but flows with the text
list-item	A block element with a marker box
table-*	Used to generate tables from non-table tags
none	Element is not displayed (used to hide/show elements)

CSS Box Model



- ---** Margin edge
- Border edge
- - - -** Padding edge
- Content edge

Source: w3.org

Changing CSS Properties With JavaScript

```
document.getElementById("x").style.display = "none";  
document.getElementById("x").style.display = "";           // inherit
```

```
var y = document.getElementById("box");  
y.style.position = "absolute";  
y.style.top = "100px";  
y.style.left = "100px";
```

Reset Stylesheets

- Browsers start CSS formatting with internal defaults
- Defaults might not be what you're looking for
- Always use a reset stylesheet to start with known defaults

Example:

```
* {margin: 0; padding: 0; border: 0; font-size: 100%; font: inherit; vertical-align: baseline; }
```

Example: <http://meyerweb.com/eric/tools/css/reset/>

Questions?

