

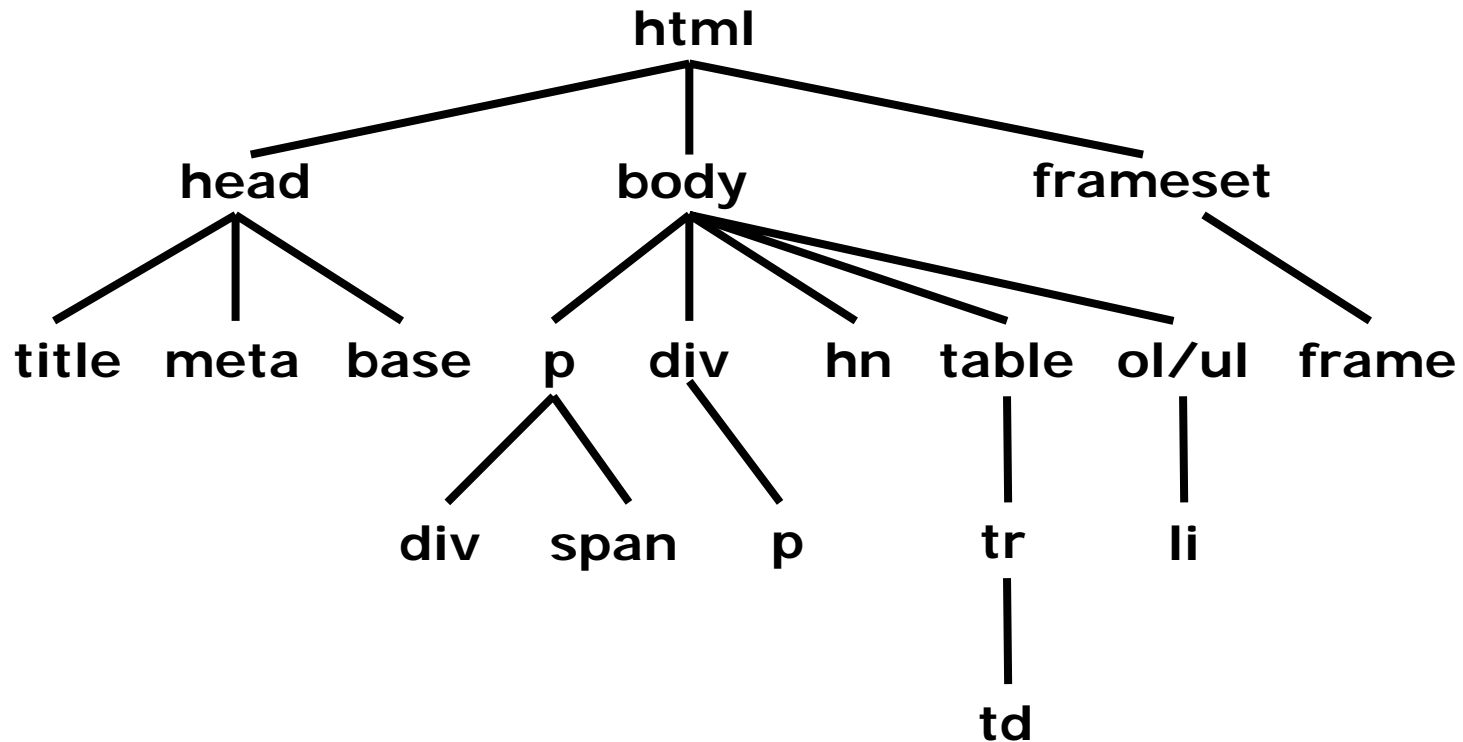
Web应用基础



HTML

- HTML: logical structure

HTML



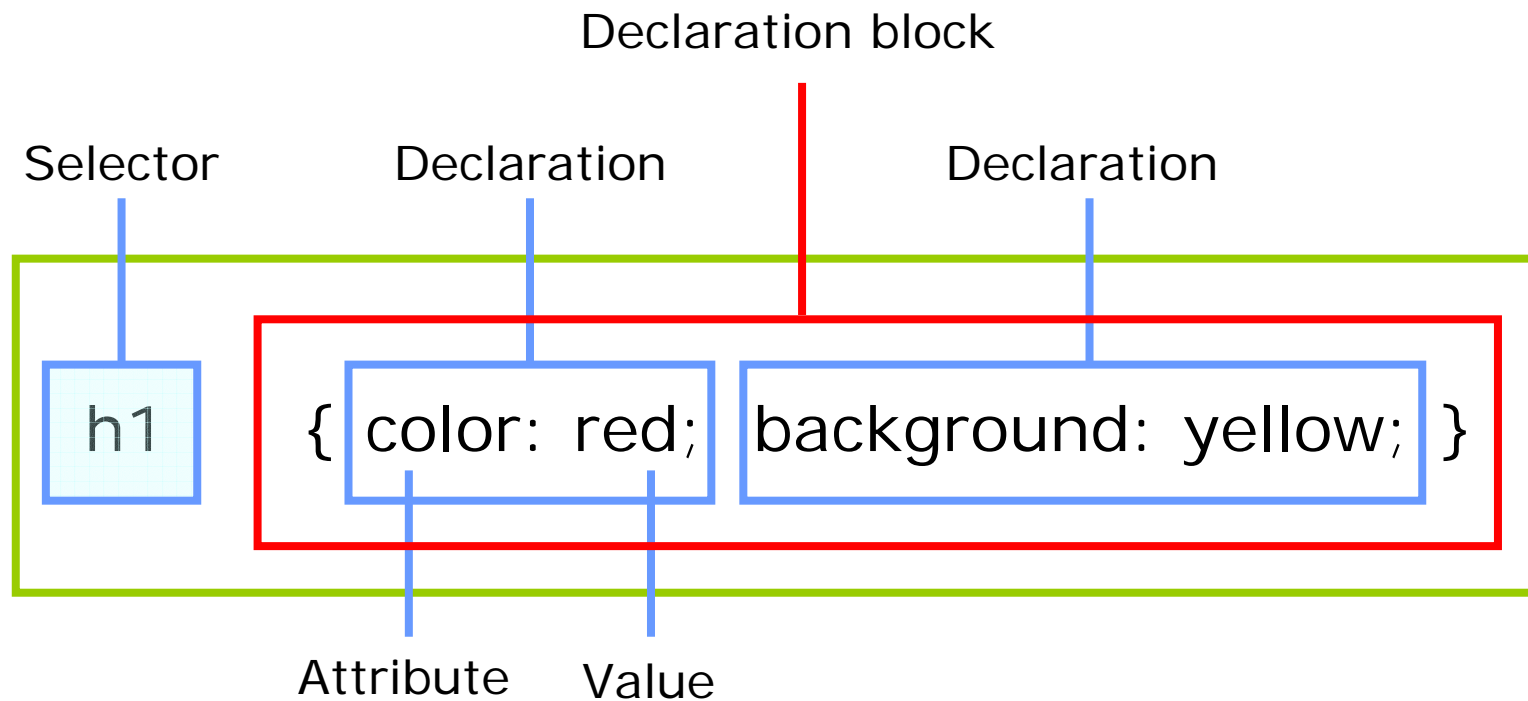
``
``
`<input type = "... " >`
`<button type = "... " >`

`
`
`<hr >`

CSS

- CSS: presentation

Selector and Declaration



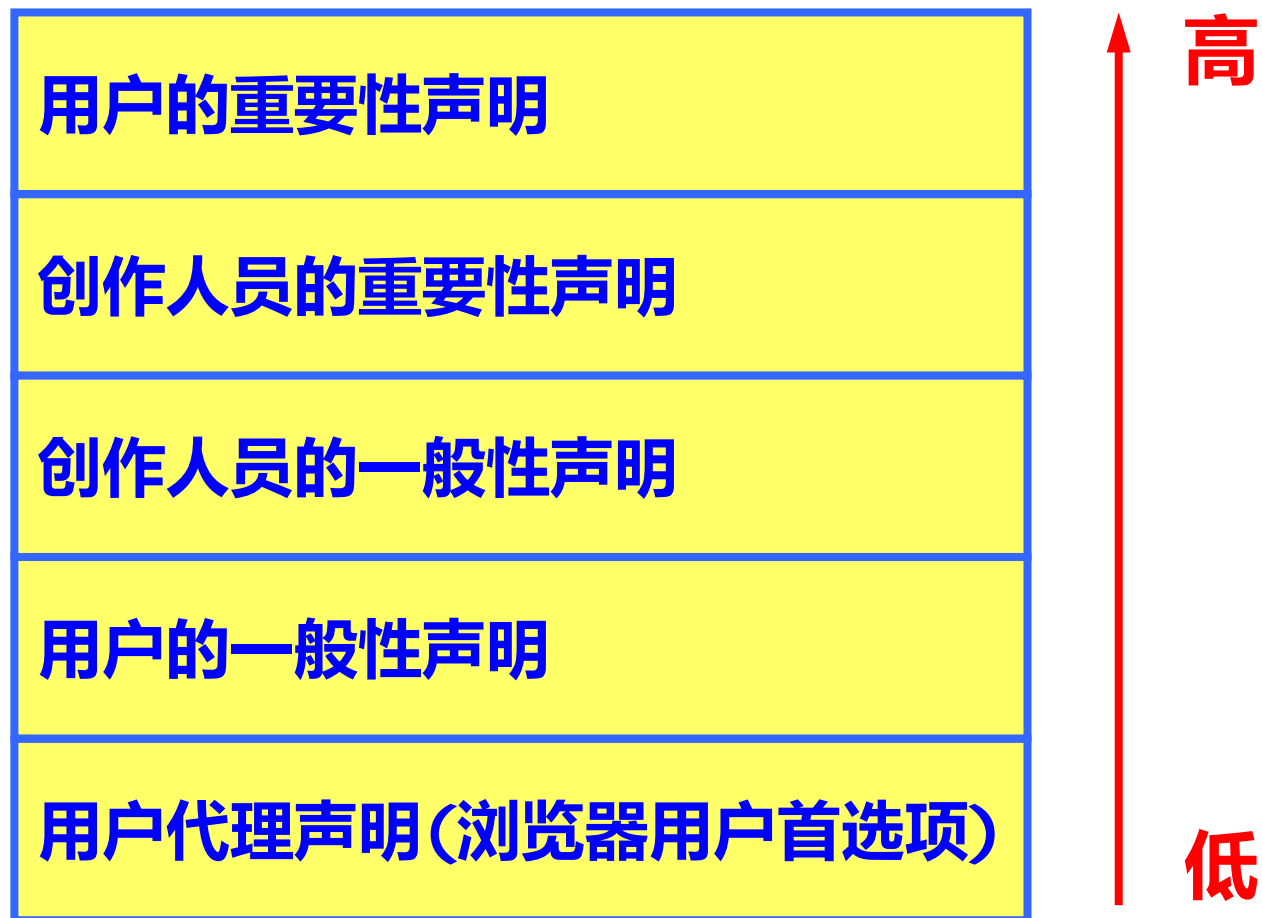
Selector

类型	特征符号	实例
元素选择器	,	h1, h2 {font: medium Arial;}
类选择器	.	p.warning {font-style: italic; color: blue;}
ID选择器	#	#lead-head {color: red; background: yellow;}
属性选择器	[]	a [href*="fudan.edu.cn"] {color: maroon;}
后代选择器	空格 + >	table * td {color: blue;}
伪类选择器	:	a:visited:hover {color: gray;}

特殊性

内联样式	1, 0, 0, 0
ID选择器	0, 1, 0, 0
类/属性/伪类选择器	0, 0, 1, 0
元素/后代选择器 伪元素	0, 0, 0, 1
结合符 通配符 HTML属性	0, 0, 0, 0
继承	None

声明来源的优先级





CSS All Together

- Font and Text
- Color and Background
- Box and Border
- Float and Position
- Table and List

font

font-family

Palatino Linotype

Monotype Corsiva

font-weight

font-weight

font-weight

font-size

font-size

font-size

font-style

font-style

font-style

font: italic 500 2em Arial;

text

text-indent

With plutonium, the possibility of implosion is very real, and must be avoid at all cost.

With plutonium, the possibility of implosion is very real, and must be avoid at all cost.

text-align

With plutonium, the possibility of implosion is very real, and must be avoid at all cost.

With plutonium, the possibility of implosion is very real, and must be avoid at all cost.

line-height

With plutonium, the possibility of implosion is very real, and must be avoid at all cost.

With plutonium, the possibility of implosion is very real, and...

vertical-align

With plutonium, the possibility of implosion is very real, and must be avoid at all cost.

With plutonium, the possibility of implosion is very ^{real}, and must be avoid at all cost.

text-decoration

With plutonium, the possibility of implosion is very real, and must be avoid at all cost.

With plutonium, the possibility of implosion is very real, and must be avoid at all cost.

white-space

With plutonium, the possibility of implosion is very real, and must be avoid at all cost.

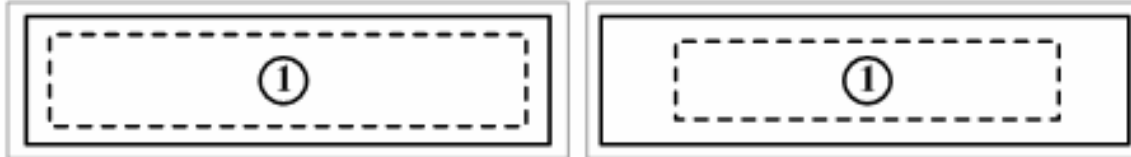
With plutonium, the possibility of implosion is very real, and must be avoid at all cost.

box

margin



padding



border



width



height



border

border-width



border-style



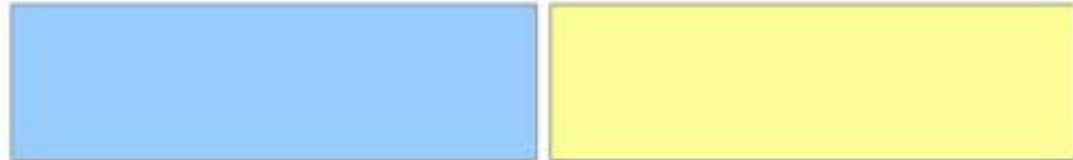
border-color



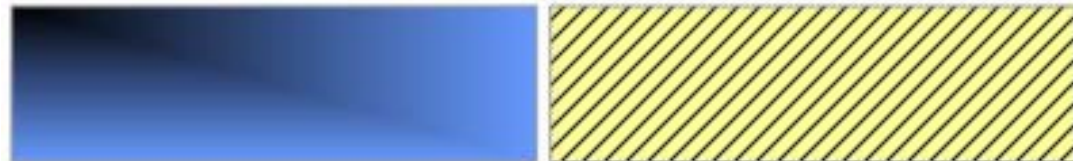
border: 3px solid black;

background

background-color



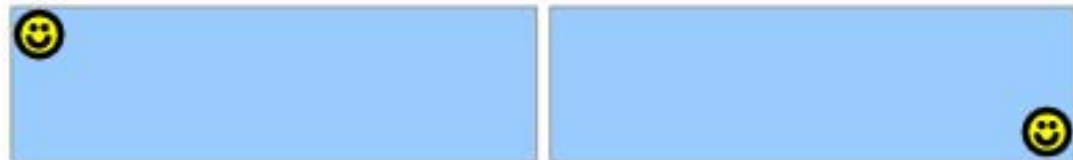
background-image



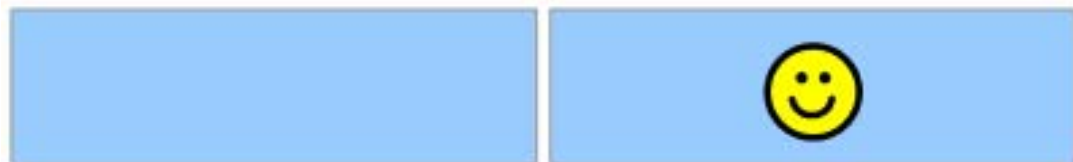
background-repeat



background-position

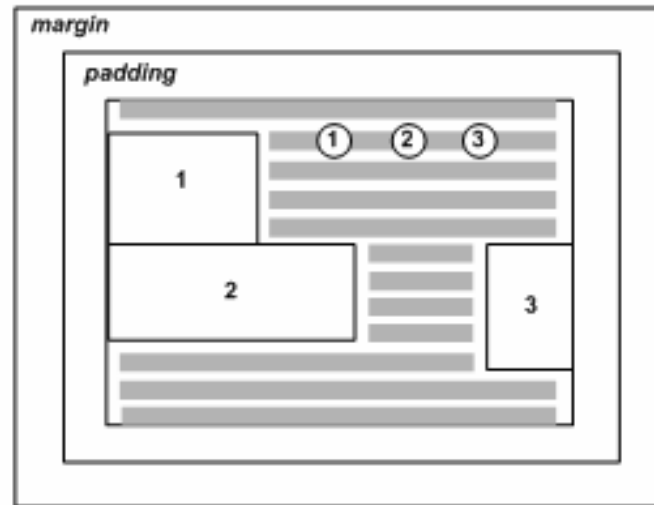
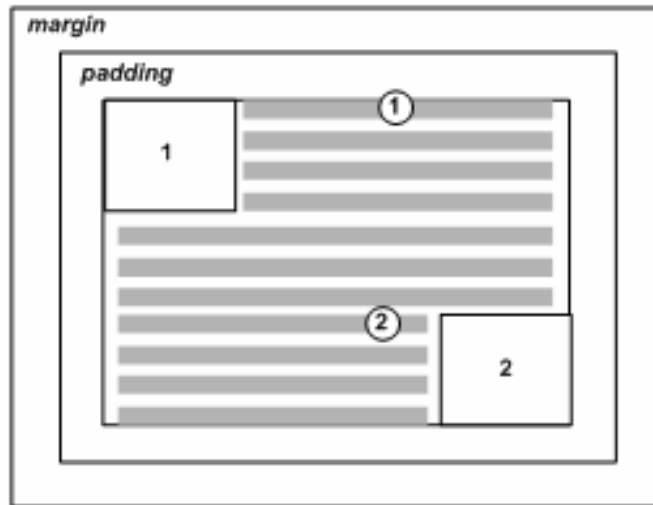


background-attachment

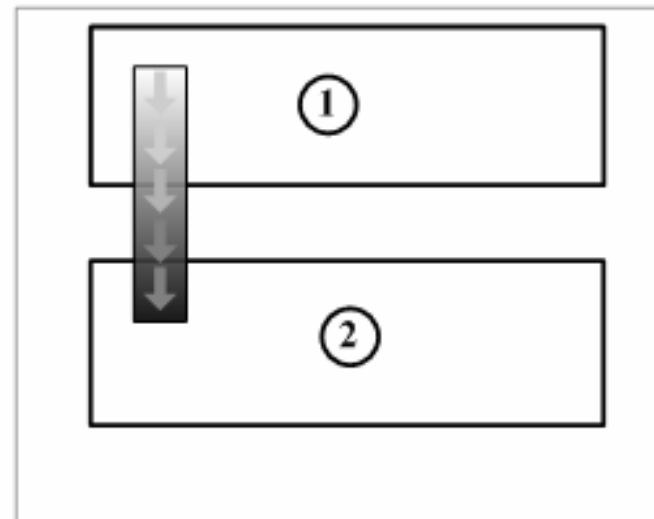
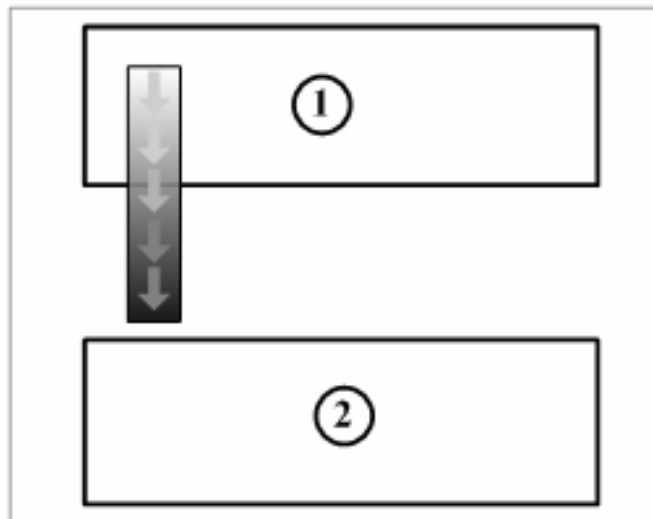


float

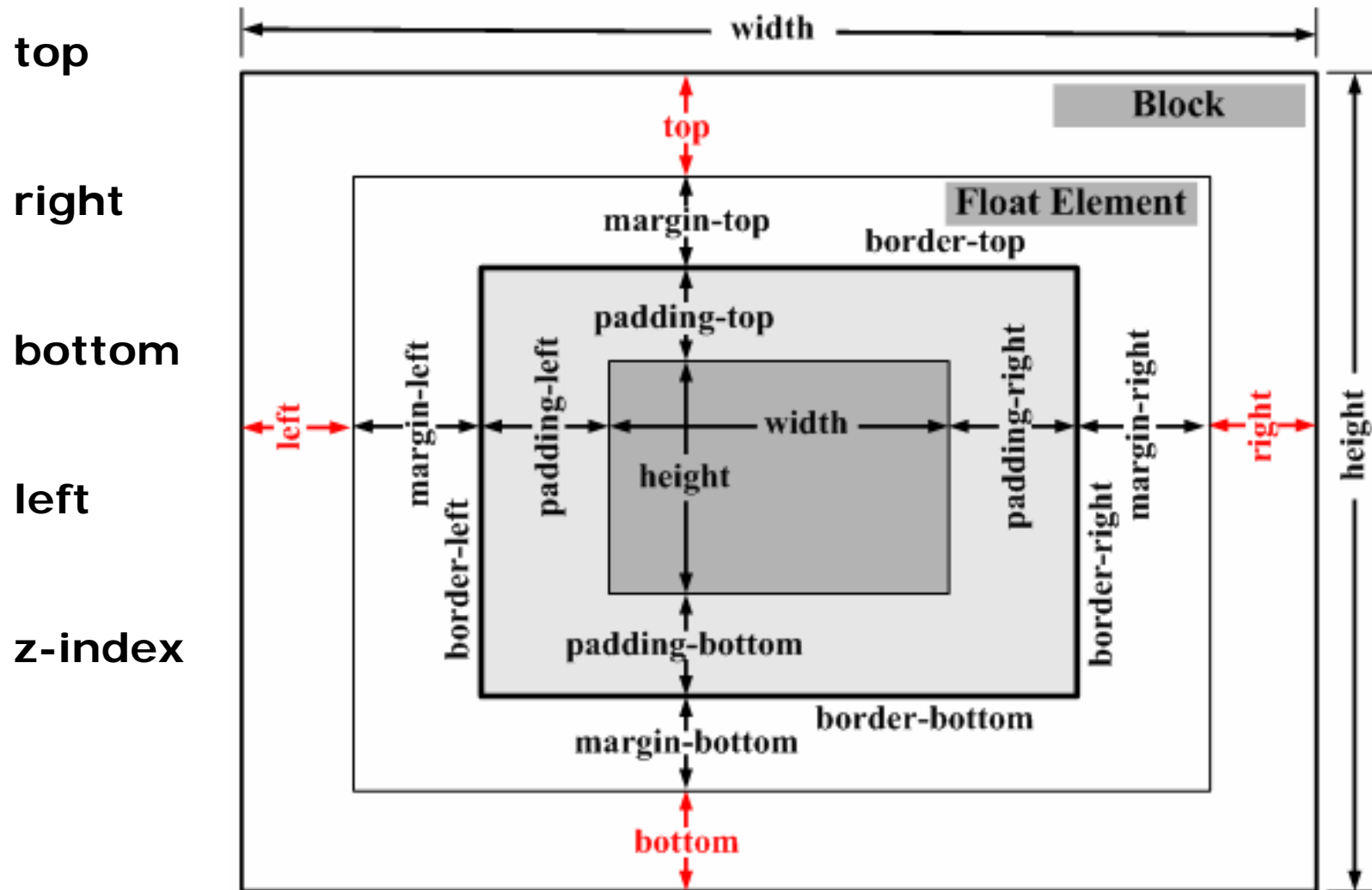
float



clear



position



position

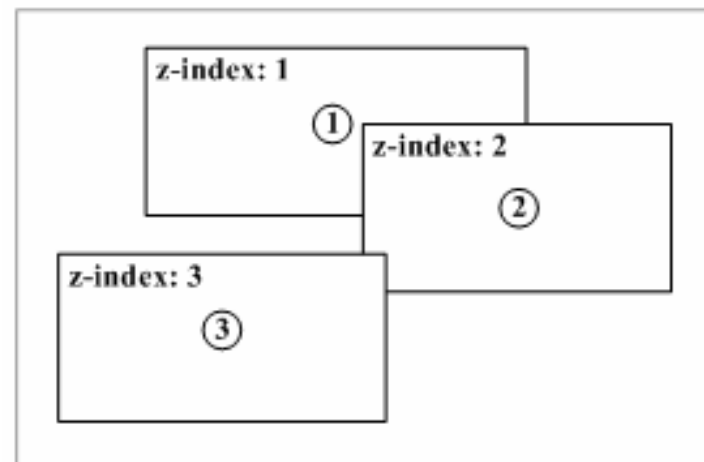
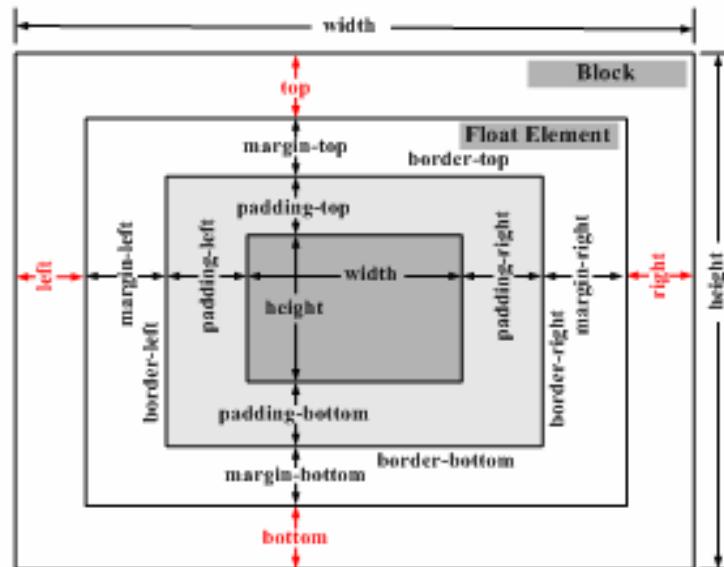
top

right

bottom

left

z-index



table

border-collapse

border-collapse: separate

Pets	Cats		Dogs	
	Male	Female	Male	Female
Measured Weight	17	12	40	35
	15	16	34	27

border-collapse: collapse

Pets	Cats		Dogs	
	Male	Female	Male	Female
Measured Weight	17	12	40	35
	15	16	34	27

border-style

Cell 1-1	Cell 1-2	Cell 1-3	Cell 1-4
Cell 2-1	Cell 2-2	Cell 2-3	Cell 2-4
Cell 3-1	Cell 3-2	Cell 3-3	Cell 3-4
Cell 4-1	Cell 4-2	Cell 4-3	Cell 4-4

list

list-style-type

- China
People's Republic of China
- EU
European Union
- USA
United States

- China
People's Republic of China
- EU
European Union
- USA
United States

list-style-image

1. China
People's Republic of China
2. EU
European Union
3. USA
United States

- ☺ China
People's Republic of China
- ☺ EU
European Union
- ☺ USA
United States

list-style-position

- China
People's Republic of China
- EU
European Union
- USA
United States

- China
People's Republic of China
- EU
European Union
- USA
United States

list-style: url(ohio.gif) square inside;

CSS

```
<html>
  <head>
    <title>Harry's ancestors</title>
    ① <link rel="stylesheet" href="sheet1.css" type="text/css" media="all"/>
    <style type="text/css"><!--
      @import url(sheet2.css);
      h1 {color: maroon; }
      body {background: yellow; }
    --></style>
  </head>
  <body>
    <p style="color: green;">Rowling's Black Family... </p>
  </body>
</html>
```

CSS

```
<html>
  <head>
    <title>Harry's ancestors</title>
    <link rel="stylesheet" href="sheet1.css" type="text/css" media="all"/>
    ② <style type="text/css"><!--
      @import url(sheet2.css);
      h1 {color: maroon; }
      body {background: yellow; }
      --></style>
  </head>
  <body>
    <p style="color: green;">Rowling's Black Family... </p>
  </body>
</html>
```

CSS

```
<html>
  <head>
    <title>Harry's ancestors</title>
    <link rel="stylesheet" href="sheet1.css" type="text/css" media="all"/>
    <style type="text/css"><!--
③  @import url(sheet2.css);
    h1 {color: maroon; }
    body {background: yellow; }
    --></style>
  </head>
  <body>
    <p style="color: green;">Rowling's Black Family... </p>
  </body>
</html>
```

CSS

```
<html>
  <head>
    <title>Harry's ancestors</title>
    <link rel="stylesheet" href="sheet1.css" type="text/css" media="all"/>
    <style type="text/css"><!--
      @import url(sheet2.css);
      h1 {color: maroon; }
      body {background: yellow; }
    --></style>
  </head>
  <body>
    ④ <p style="color: green;">Rowling's Black Family... </p>
  </body>
</html>
```



Structure and Presentation

- Reuse
- Easy to maintain
- Professional collaboration

XML (eXtensible Markup Language)

- Cross-platform: Browser, PDA, Phone, ...
- Semantic

XML: semantic

```
<Person>
  <Name>
    <First>David</First>
    <Last>Crowder</Last>
  </Name>
  <Age>49</Age>
</Person>
```

XML Schema: syntax

```
<complexType name="Person">
  <sequence>
    <complexType name="Name">
      <sequence>
        <element name="First" type="string"
          minOccurs="0" maxOccurs="unbounded"/>
        <element name="Last" type="string"/>
      </sequence>
    </complexType>
    <element name="Age" type="string"/>
  </sequence>
</complexType>
```

XSLT (eXtensible Stylesheet Language Transformations)

```
<?xml version="1.0" encoding="UTF-8" >
<?xml-stylesheet type="text/xsl" href="person.xsl" >
<Person >
  <Name >
    <First >David/First >
    <Last >Crowder</Last >
  </Name >
  <Age >49</Age >
</Person >
```

```
<?xml version="1.0" encoding="UTF-8" ?>
- <person >
- <name >
  <first >David</first >
  <last >Crowder</last >
</name >
  <age >49</age >
</person >
```

Introduction

First name	Last name	Age
David	Crowder	49

XSLT (eXtensible Stylesheet Language Transformations)

```
<?xml version="1.0" encoding="UTF-8"?>
<xsl:stylesheet version="1.0"
  xmlns:xsl="http://www.w3.org/1999/XSL/Transform">
  <xsl:template match="/Person">
    <html>
    <head><title>An author</title></head>
    <body>
      <h2>Introduction</h2>
      <table><tr><th>First name</th>
        <th>Last name</th><th>Age</th></tr>
      <tr><xsl:for-each select="Name">
        <td><xsl:value-of select="First"/></td>
        <td><xsl:value-of select="Last"/></td>
      </xsl:for-each>
        <td><xsl:value-of select="Age"/></td></tr>
      </table></body></html>
    </xsl:template>
  </xsl:stylesheet>
```

XSLT (eXtensible Stylesheet Language Transformations)

- ❑ Transform XML into HTML
- ❑ Logical Structure

CSS and XSL

```
<?xml version="1.0" encoding="UTF-8"?>
<xsl:stylesheet version="1.0"
  xmlns:xsl="http://www.w3.org/1999/XSL/Transform" >
  <xsl:template match="/person" >
    <html>
      <head>
        <title>An author</title>
        <link rel="stylesheet" type="text/css" href="style.css"/>
      </head>
      <body>
        <h2>Introduction</h2>
        ...
      </body>
    </html>
  </xsl:template>
</xsl:stylesheet>
```

Introduction

First name	Last name	Age
David	Crowder	49

All Together

- ❑ XML: Semantic, Cross-platform
- ❑ XML Schema or DTD (Document Type Definition): Syntax
- ❑ XSLT: Logical Structure, Transform XML into HTML
- ❑ CSS: Presentation

XHTML

- eXtensible HyperText Markup Language

XHTML

- ❑ Well-formed (close element and nested element)
- ❑ Element and attribute names must be in lower case
- ❑ Quoted attribute values
- ❑ Terminated empty elements
- ❑ Attribute id instead of attribute name (form, frame, img, ...)
- ❑ Some element have been dumped (i, b, u, font, center, ...)

XHTML

```
<?xml version="1.0" encoding="UTF-8"?>
<?xml-stylesheet type="text/css"
  href="http://www.w3.org/MarkUp/style/xhtml12.css"?>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 2.0//EN"
  "http://www.w3.org/MarkUp/DTD/xhtml12.dtd" >
<html xmlns="http://www.w3.org/2002/06/xhtml12/" xml:lang="en"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.w3.org/2002/06/xhtml12/
  http://www.w3.org/MarkUp/SCHEMA/xhtml12.xsd" >
  <head>
    <title>Title</title>
  </head>
  <body>
    ...
  </body>
</html>
```

Any Question?

