

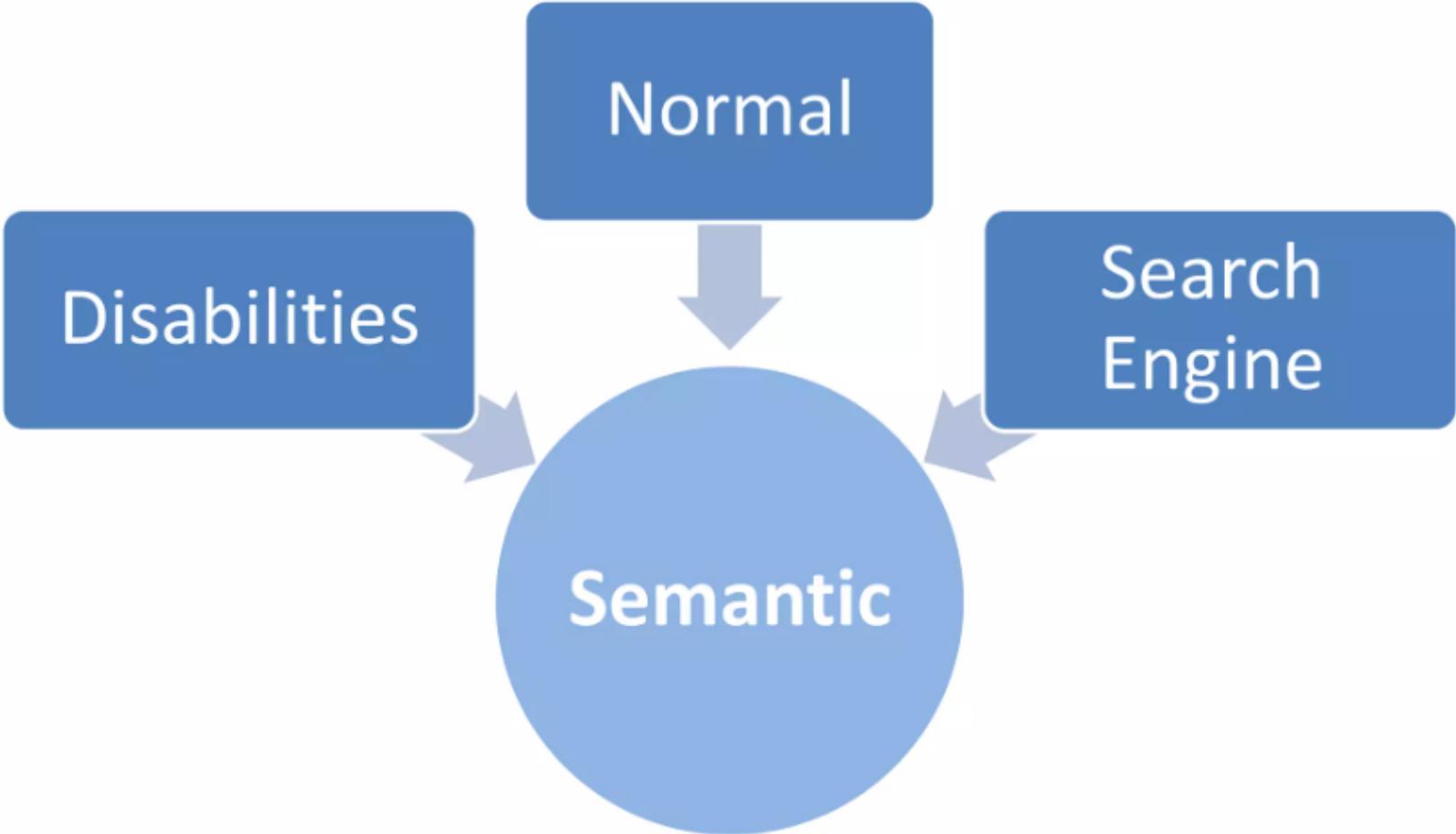
HTML / CSS

**Presented by Fazel Rajabi &
Matin Salimi**

Dr. Hamed Malek

Introduction to HTML & CSS

Website Users



Website layers

Behavior (JS)



Presentation (CSS)

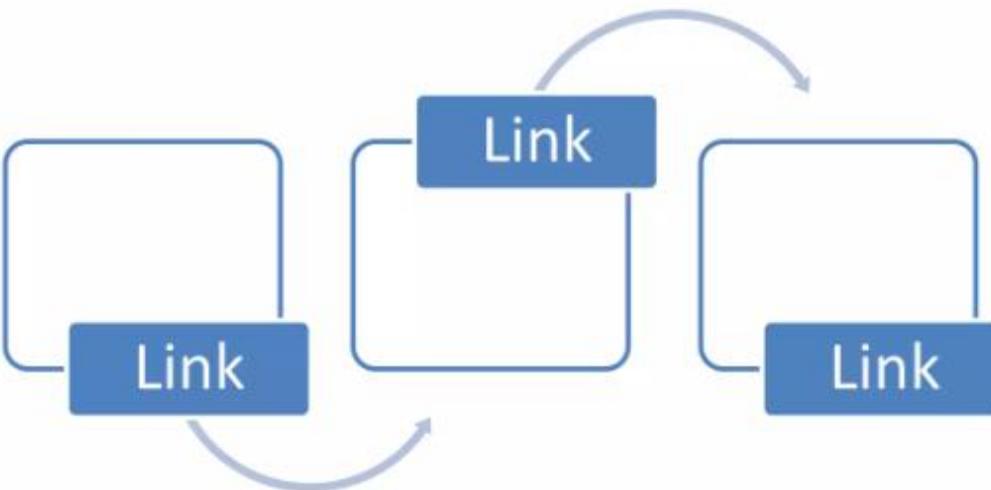


Content (HTML)

HTML

What is HTML?

Hyper Text Markup Language



Tags

< p > Content </ p >

↑
Open

↑
Close

Nested Tags

```
<div>
  <p>Content</p>
</div>
```

Basic Structure

```
<!DOCTYPE HTML>
<html>
  <head></head>
  <body></body>
</html>
```

Head

```
<!DOCTYPE HTML>
<html>
  <head>
    <title>Learn HTML</title>
  </head>
  <body></body>
</html>
```

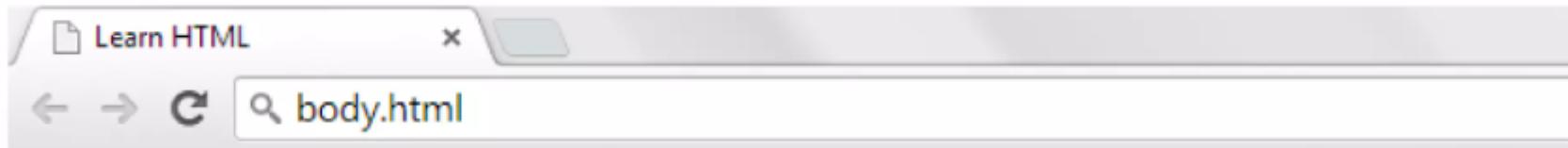
Preview



Body

```
<!DOCTYPE HTML>
<html>
  <head>
    <title>Learn HTML</title>
  </head>
  <body>
    <h1>My first page</h1>
    <p>Lorem ipsum dolor sit amet,
       consectetur adipiscing elit.
       ipsum dolor sit amet, consectetur
       adipiscing elit.</p>
  </body>
</html>
```

Preview



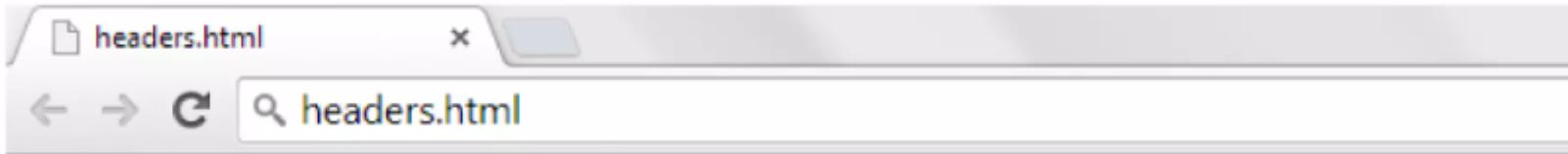
My first page

Lorem ipsum dolor sit amet, consectetur adipiscing elit. ipsum dolor sit amet, consectetur adipiscing elit.

Headers

```
<h1>Header 1</h1>
<h2>Header 2</h2>
<h3>Header 3</h3>
<h4>Header 4</h4>
<h5>Header 5</h5>
<h6>Header 6</h6>
```

Preview



Header 1

Header 2

Header 3

Header 4

Header 5

Header 6

Paragraph

```
<p>Lorem ipsum dolor sit amet, consectetur  
adipiscing elit. ipsum dolor sit amet,  
consectetur adipiscing elit.</p>
```

```
<p>Lorem ipsum dolor sit amet, consectetur  
adipiscing elit. ipsum dolor sit amet,  
consectetur adipiscing elit.</p>
```

Preview



Lorem ipsum dolor sit amet, consectetur adipiscing elit. ipsum dolor sit. consectetur adipiscing elit.

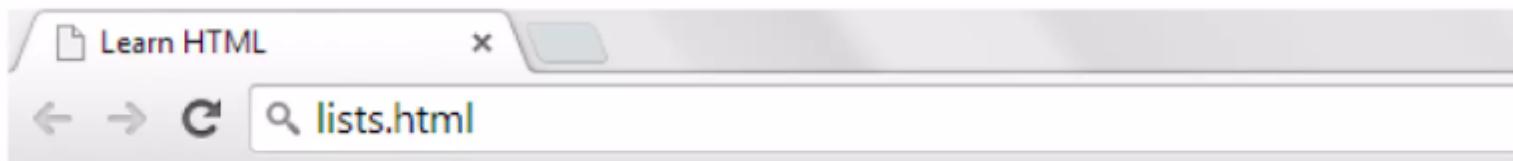
Lorem ipsum dolor sit amet, consectetur adipiscing elit. ipsum dolor sit. consectetur adipiscing elit.

Lists

```
<ul>
  <li>List item</li>
  <li>List item</li>
  <li>List item</li>
</ul>

<ol>
  <li>List item</li>
  <li>List item</li>
  <li>List item</li>
</ol>
```

Preview



- List item
- List item
- List item

1. List item
2. List item
3. List item

Div

```
<div>
  <h1>Division Header</h1>
  <p>Division Paragraph</p>
</div>

<div>
  <h1>Division 2 Header</h1>
  <p>Division 2 Paragraph</p>
</div>
```

Preview



Division Header

Division Paragraph

Division 2 Header

Division 2 Paragraph

Block elements

BLOCK ELEMENTS EXPAND NATURALLY →



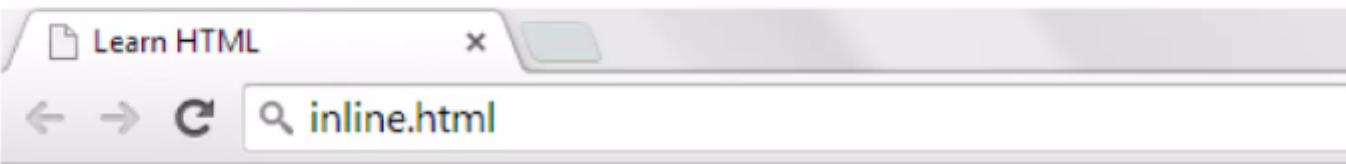
AND NATURALLY DROP BELOW OTHER ELEMENTS



Inline elements

<p>This paragraph contains inline elment</p>

Preview



This paragraph contains **inline element**

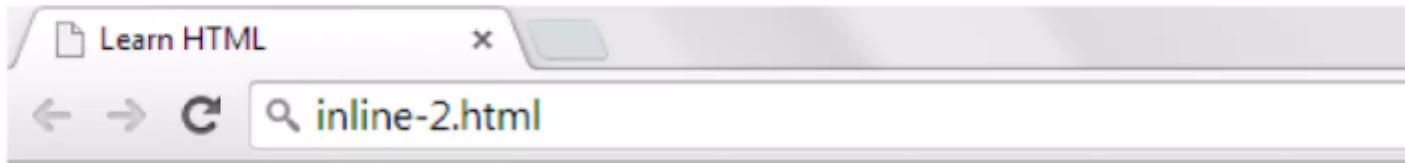
More Inline elements

Inline element

Inline element

Inline element

Preview



Inline element *Inline element* Inline element

Attribute

```

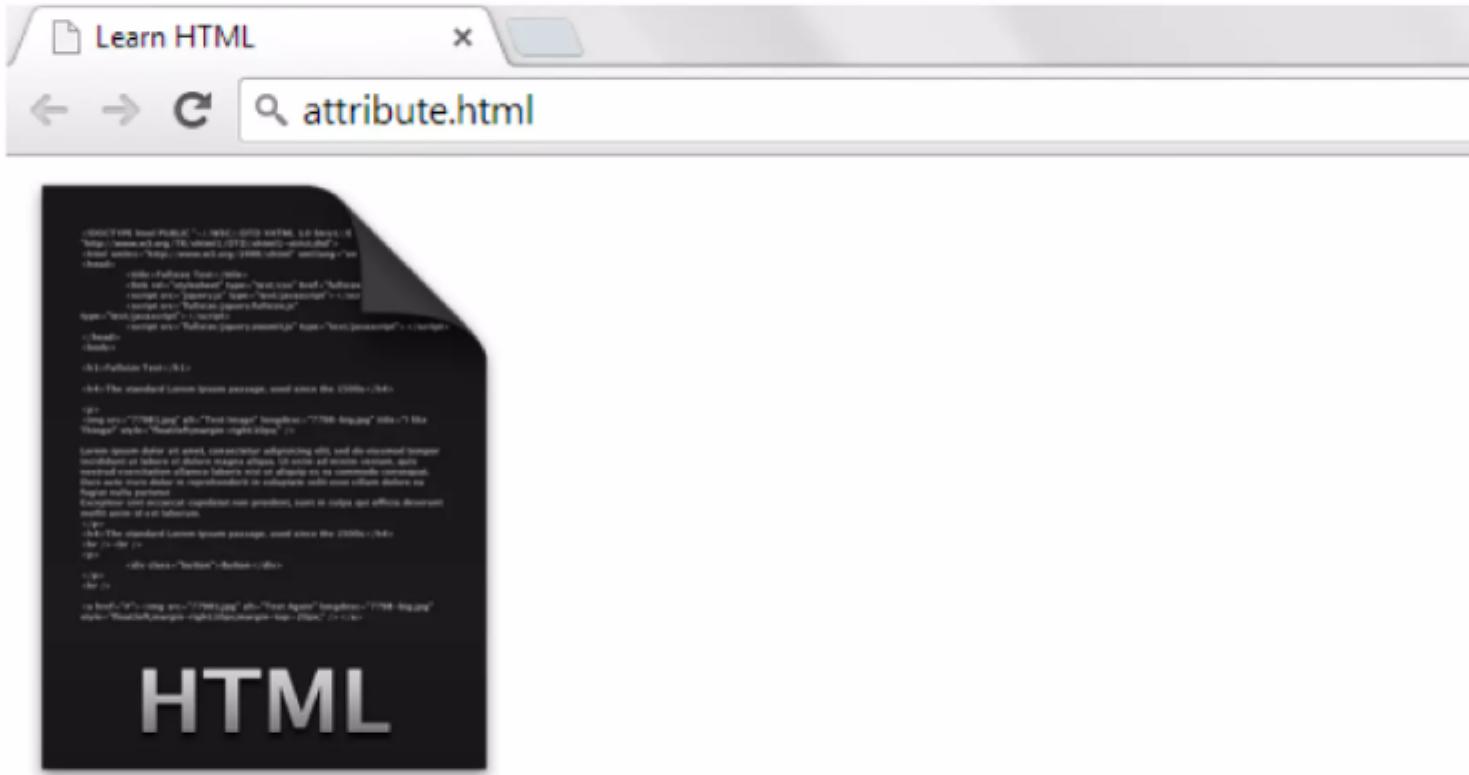
```

↑
Name

↑
Value

Add more info to tag

Preview



HTML 5 tags

<header> ... </header>

<footer> ... </footer>

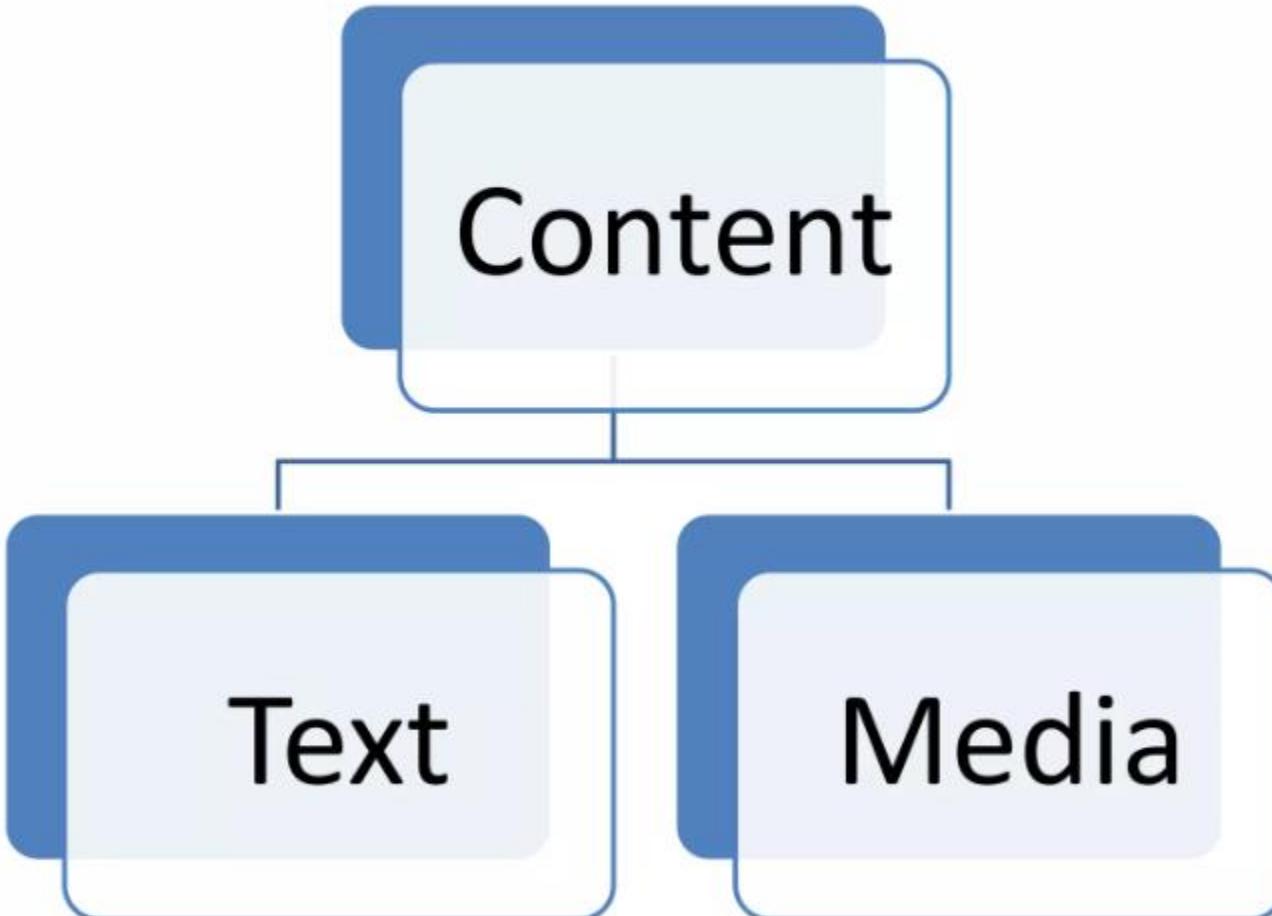
<aside> ... </aside>

<nav> ... </nav>

<section> ... </section>

<article> ... </article>

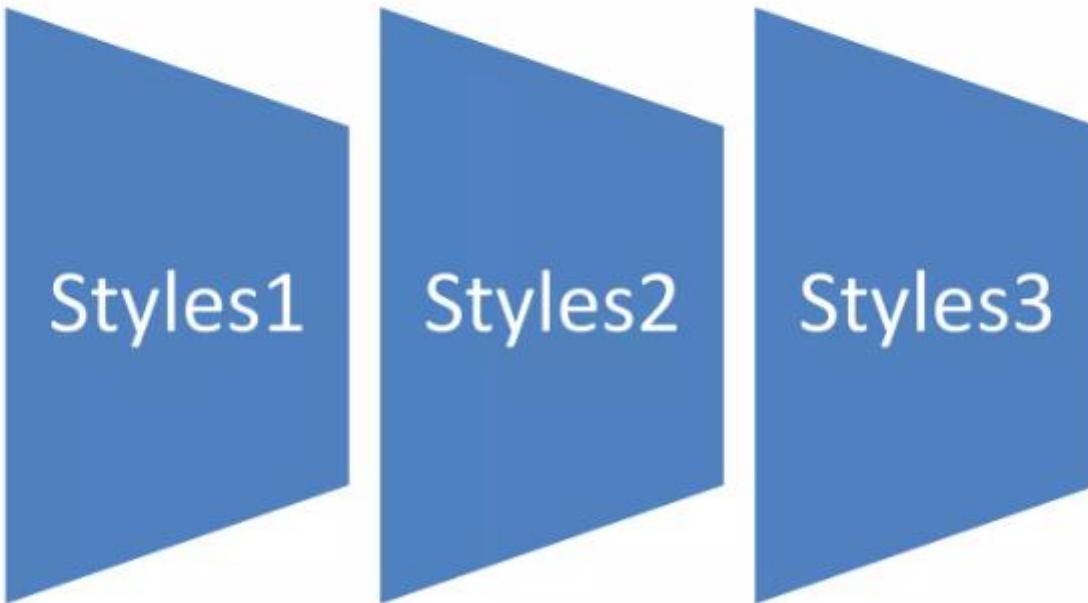
Semantic



CSS

What is CSS?

Cascading Style Sheets



How to use it?

```
<head>
  <title>Learn HTML</title>
  <link rel="stylesheet" href="../stylesheets/styles.css">
</head>
```

```
<style>
  h1{color:red;}
  p{font-size:14px;}
</style>
```

```
<h1 style="color:red;">Selectors</h1>
<p style="font-size:14px;">Lorem ipsum dolor sit
amet, consectetur adipiscing elit. Maecenas non arcu
ornare, fermentum erat ac, semper enim.</p>
```

Rules



Selectors

p

Element

.name

Class

#name

Id

Element Selector

```
<h1>My first page</h1>
<p>Lorem ipsum dolor sit amet,
consectetur adipiscing elit.
ipsum dolor sit amet, consectetur
adipiscing elit.</p>
```

```
h1{color:red;}
p{font-size:20px;}
```

Preview



My first page

Lorem ipsum dolor sit amet, consectetur adipiscing elit. ipsum dolor
consectetur adipiscing elit.

Class Selector

```
<h1>My first page</h1>

<p class="intro">Lorem ipsum dolor sit amet,  
adipiscing elit. adipiscing elit.</p>

<p>Lorem ipsum dolor sit amet, consectetur  
adipiscing elit. adipiscing elit.</p>
```

```
h1{color:red;}  
p{font-size:20px;}  
.intro{color:green;}
```

Preview



My first page

Lorem ipsum dolor sit amet,consectetur adipiscing elit. adipiscing elit.

Lorem ipsum dolor sit amet,consectetur adipiscing elit. adipiscing elit.

ID Selector

```
<h1>My first page</h1>

<p id="intro">Lorem ipsum dolor sit amet,  
adipiscing elit. adipiscing elit.</p>

<p>Lorem ipsum dolor sit amet,consectetur  
adipiscing elit. adipiscing elit.</p>

h1{color:red; }  
p{font-size:20px; }  
#intro{color:green; }
```

Preview



2 Rules

```
<h1>My first page</h1>

<p id="intro" class="intro">Lorem ipsum dolor
adipiscing elit. adipiscing elit.</p>
```

```
<p>Lorem ipsum dolor sit amet,consectetur
adipiscing elit. adipiscing elit.</p>
```

```
h1{color:red; }
p{font-size:20px; }
#intro{color:green; }
.intro{color:blue; }
```

Preview



Specificity

1

Element

10

Class

100

Id

Class VS ID

Class

- Use a lot
- Lower specificity

ID

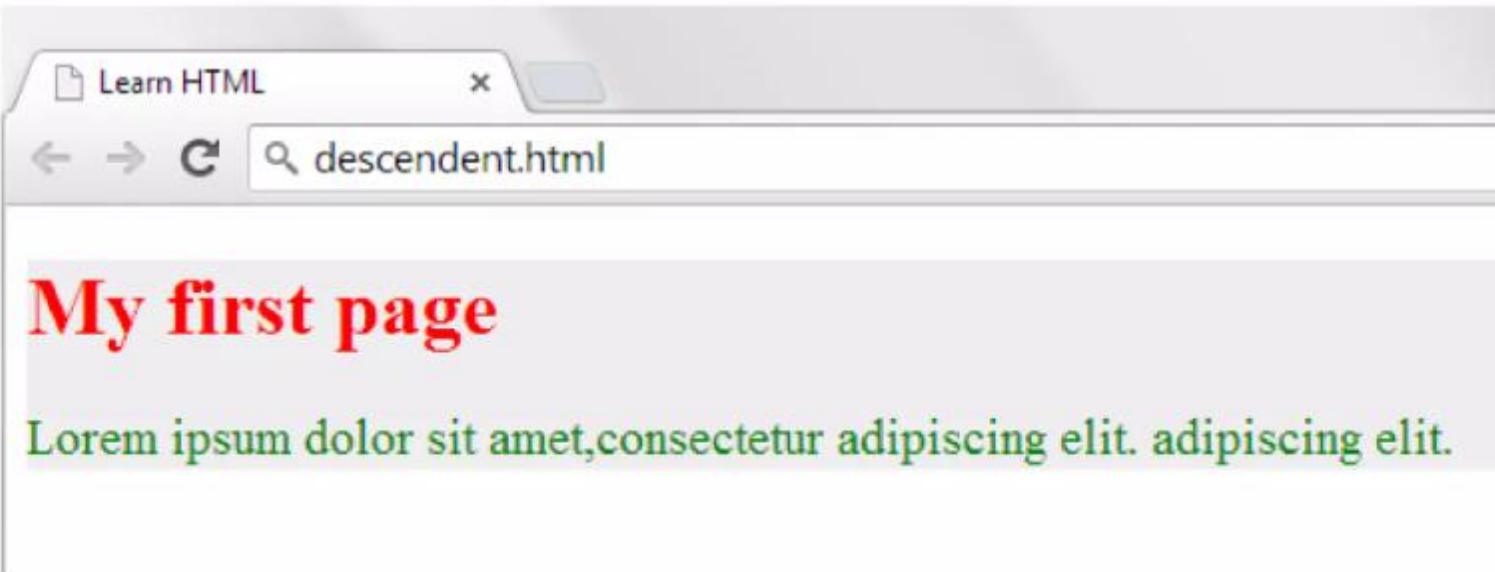
- Use once
- Higher specificity

Descendent Selector

```
<div class="content">
  <h1>My first page</h1>
  <p>Lorem ipsum dolor sit amet,consectetur
  adipiscing elit. adipiscing elit.</p>
</div>
```

```
.content{ background:#eee; }
.content h1{ color:red; }
.content p{ color:green; }
```

Preview



Naming

Bad Names

red

leftColumn

topNav

firstPara

Good Names

error

secondaryContent

mainNav

intro

Box Model (Block)



Box Model (Block)

```
<div class="box1">box1</div>
```

```
<div class="box2">box2</div>
```

Box Model (Block)

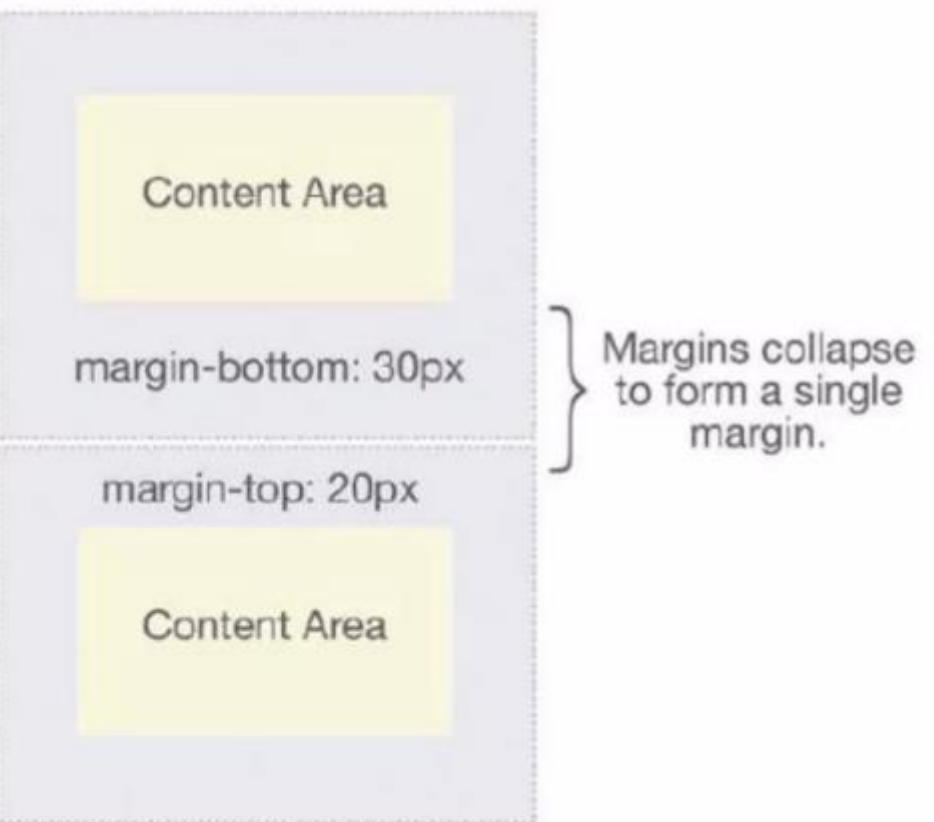
```
.box1{  
background:red;  
padding:20px;  
margin:20px;  
border: 5px solid black;  
}  
.box2{  
background:green;  
padding:20px;  
margin:20px;  
border: 5px solid black;  
}
```

Preview



Margin collapse

Before

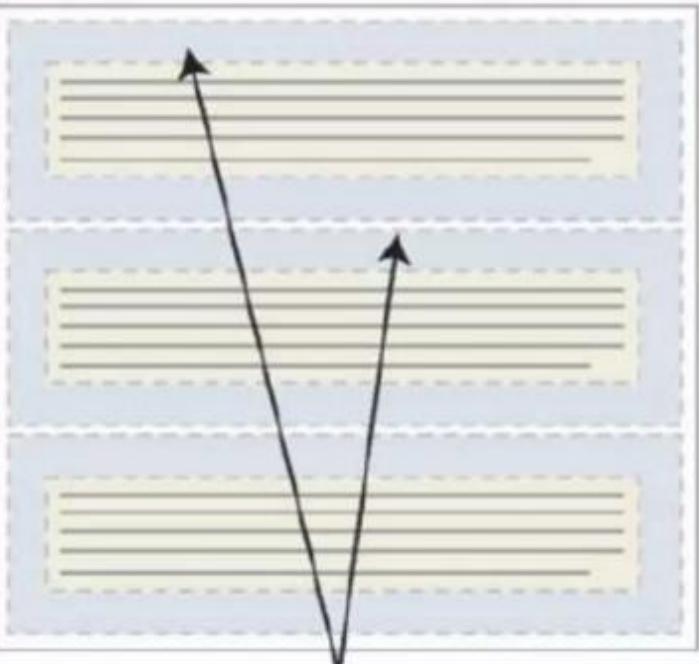


After



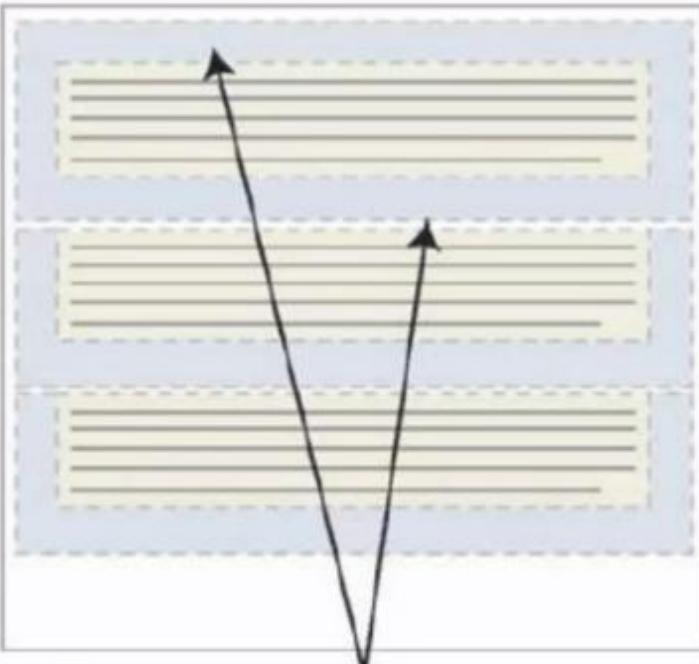
Margin collapse

Without Margin Collapsing



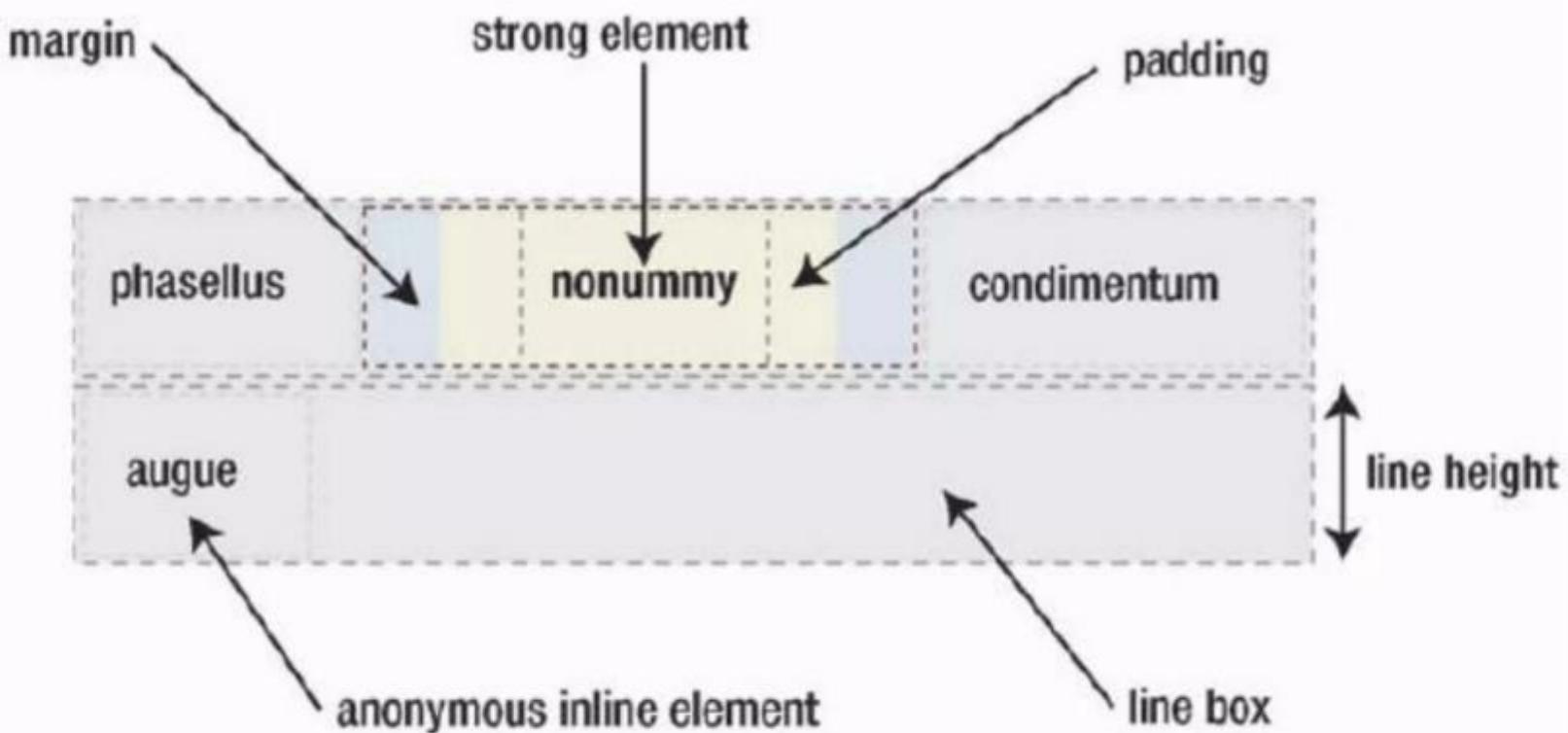
The space between paragraphs is double the space at the top.

With Margin Collapsing



The space between paragraphs is the same as the space at the top.

Box Model (Inline)



Box Model (Inline)

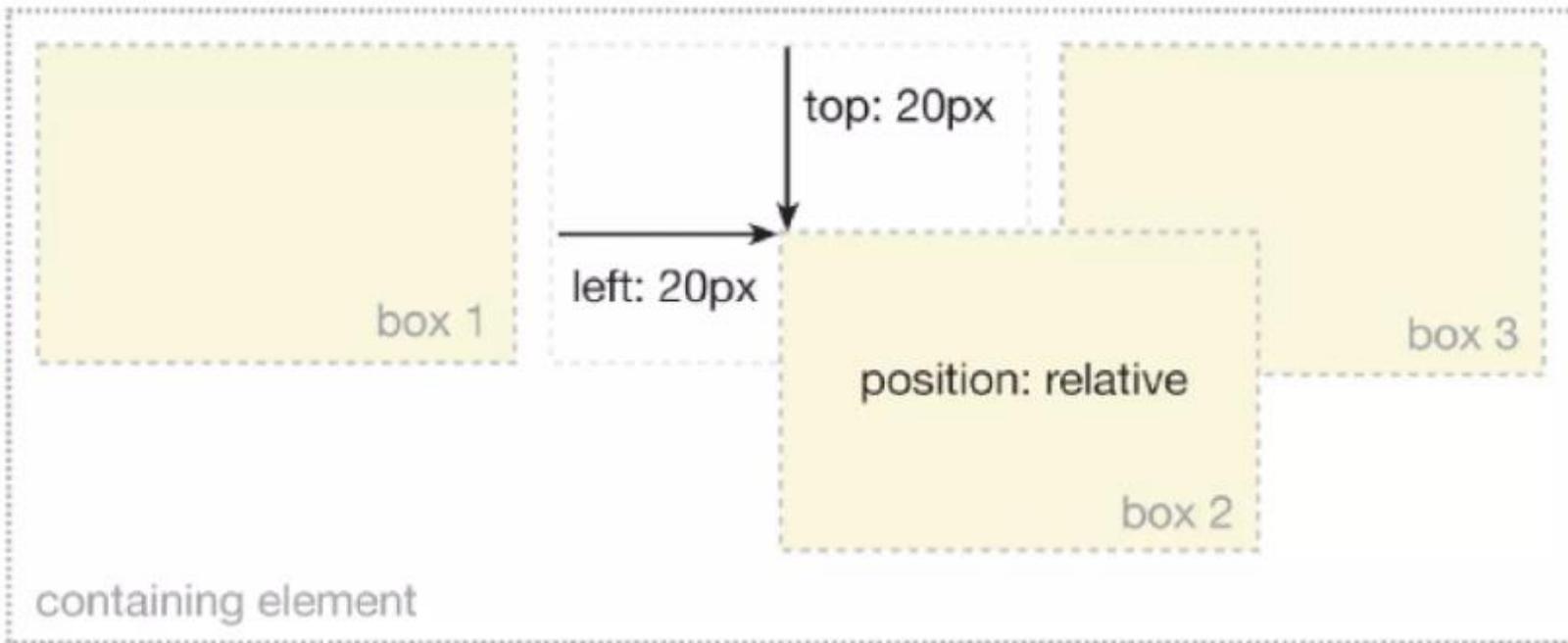
```
<p>Lorem ipsum dolor sit amet,  
consectetur <strong>adipiscing</strong>  
Duis eget felis mollis, venenatis  
nunc non, ornare nibh. venenatis  
nunc non, ornare nibh orem ipsum dolor sit  
amet </p>
```

```
strong{  
    padding:20px;  
    margin:20px;  
}
```

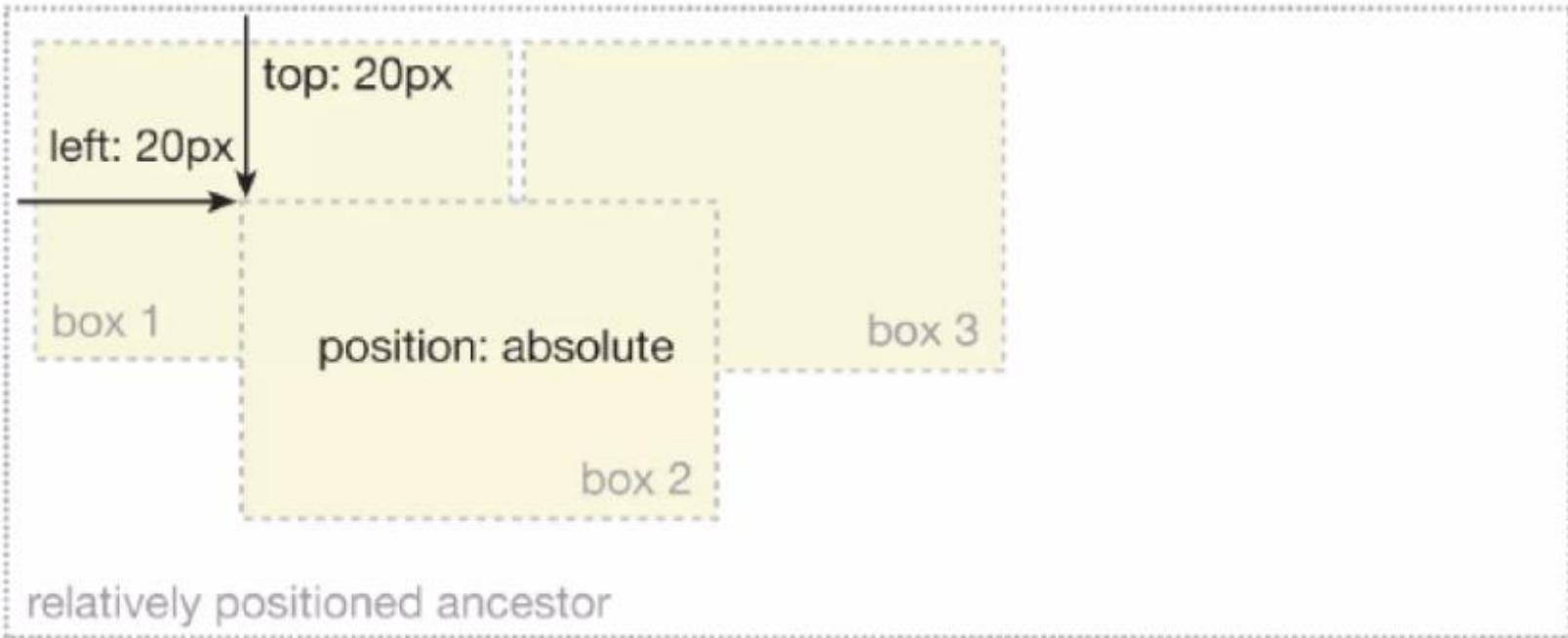
Preview



Relative Position



Absolute Position



Fixed Position

The diagram illustrates the 'Fixed Position' design pattern through three stages of a comment posting process:

- Stage 1:** Shows a sidebar menu on the left with a 'Site Updates' section containing a list of recent posts. One post is highlighted: "Jonathan Beale February 13, 2008 10:27 PM". Below the sidebar, a note says: "Actually just noticed one small glitch as a result of changing databases: all notification subscriptions have been lost! Sorry folks."
- Stage 2:** Shows a 'POST A COMMENT' form in the center. The form fields include Name (Andy Bush), Email Address (info@andybush.com), Web Site URL (http://www.andybush.com), and Comments (empty). At the bottom of the form are 'Email notification' and 'Post' buttons.
- Stage 3:** Shows a list of comments on the right. The comments are:
 - Jonathan Beale February 13, 2008 10:27 PM
 - Mark Weiser February 14, 2008 07:17 AM
 - Rob Walker February 14, 2008 07:26 AMA note below the comments says: "Actually, just noticed one small glitch as a result of changing databases: all notification subscriptions have been lost! Sorry folks." Below the comments, a note says: "I am fluent with ellipses..." and "Thanks, Jonathan!"

Comments
4 comments

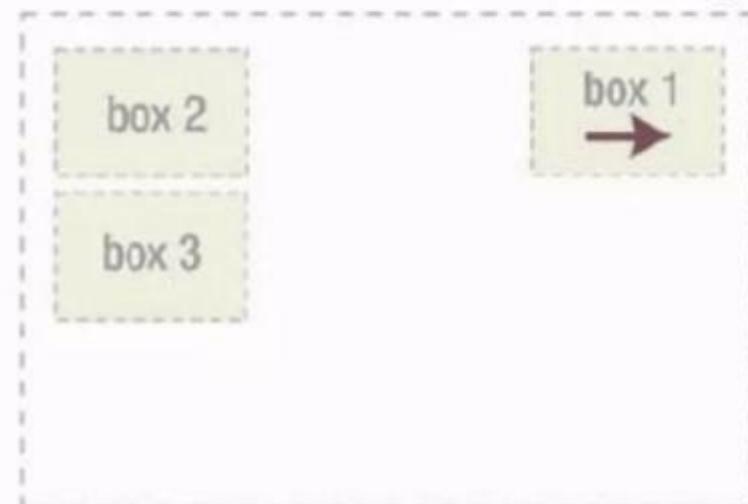
- Updated the styles on the comments.
- Added an intro paragraph to the home page.
- E-mail notification checkbox state is maintained in preview (that should make you happy, Mark).
- You can now use 'older' in comments.
- Moved MySQL type database from Derby to MySQL, which went fairly smoothly except when I forgot to use truncate I had to login to MySQL and delete the tables in order to restart the process.)

Float

No Boxes Floated

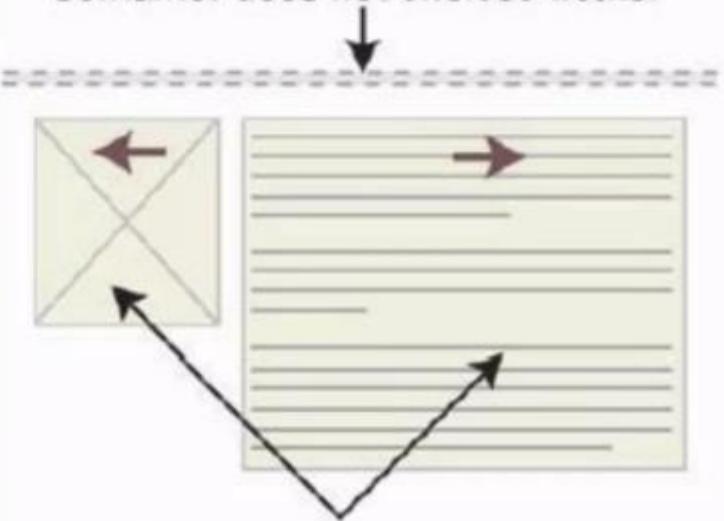


Box 1 Floated Right



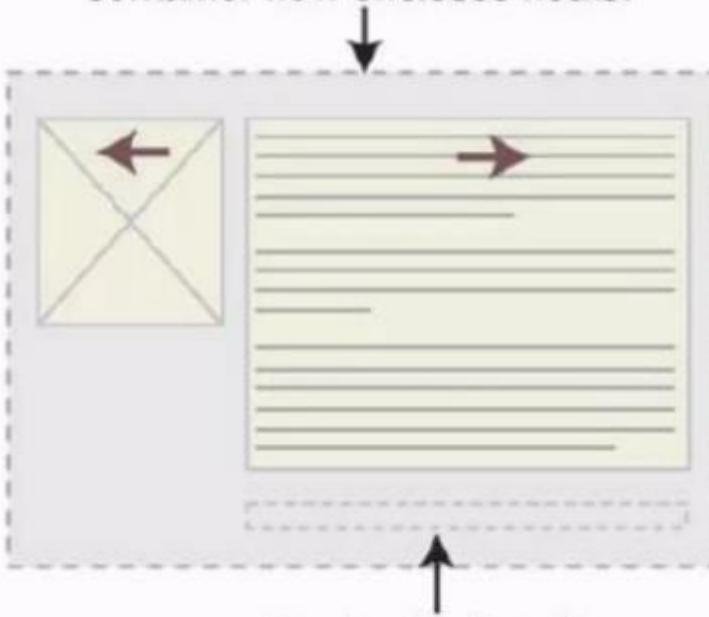
Float

Container does not enclose floats.



FLOATS take up no space.

Container now encloses floats.



Empty clearing div.

Thanks

