

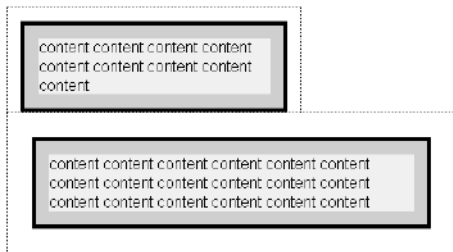


Positioning

- static
- relative
- fixed
- absolute
- float

static

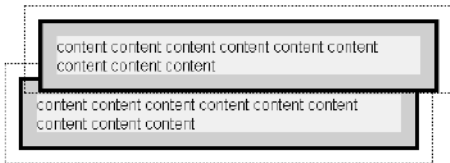
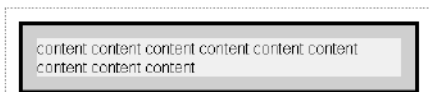
- Default or normal positioning
- Block boxes flow vertically starting at the top of their containing block
- Vertical margins are collapsed



relative

- Initially positioned following the normal flow rules.
- Surrounding boxes are positioned accordingly.
- Box is moved according to its offset properties.
- Offset specified top, right, left and bottom style properties.

```
#div2 {  
  position: rel;  
  top: 50 px;  
  left 50px;  
}
```





fixed

- Set position relative to browser window
- Determined by offset values: top, right, bottom and left
- A fixed element does not move when a web page is scrolled.
- Has no effect on other boxes in page



absolute

- Positioned relative to the first parent element that has a position other than static.
- If no such element is found, the containing block is `<html>`.

float

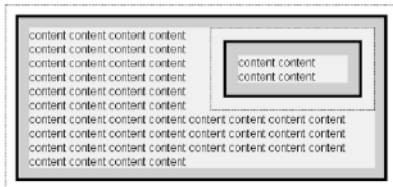
- Set the float property to left or right.
- Vertical: positioned as with normal flow; top aligned with the top of the current line box.
- Horizontal: shifted to the right or left of containing block.
- Inline content is then allowed to flow around.
- Important: Need to set width of box

<p>

`content.....`

content content content

</p>

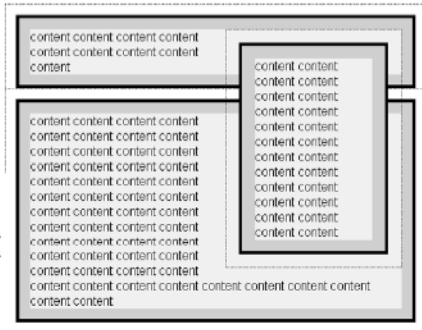


float

- A float can overlaps boxes adjacent to it in the normal flow; does not affect vertical positioning of subsequent boxes.

```
<p>  
  <span style="float:right;width:40%;">  
    content content content content content  
    content content content content content  
  </span>  
  content content content content...  
</p>
```

```
<p>  
content content content content  
content content content content...  
</p>
```

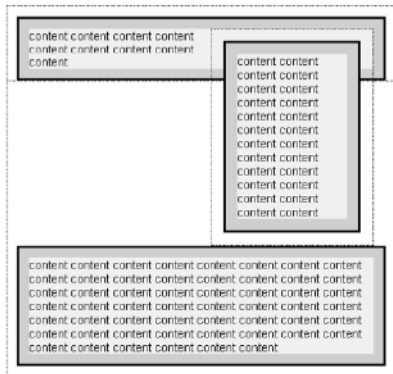


clear

- clear property pushes box to the bottom of preceding float box
- Can be set to right, left, both

```
<p>
  <span style="float:right; width:40%;">
    content content content content content
    content content content content content
  </span>
  content content content content...
</p>

<p style="clear:right;">
  content content content content
  content content content content...
</p>
```



content content content content content content content content
content content content content content content content content
content content content content content content content content
content content content content content content content content
content content content content content content content content



Best practices

1. if possible, lay out an element by *aligning* its content
 - horizontal alignment: text-align
 - vertical alignment: vertical-align
2. if alignment won't work, try *floating* the element
3. if floating won't work, try *positioning* the element
 - absolute/fixed positioning are a last resort and should not be overused



Inheritance

- Styles are inherited into nested elements.
- Can set a "default" style by setting property values for the <body> element.

```
body {  
    font-size: 16px;  
}
```



The Cascade

- It's called Cascading Style Sheets because the properties of an element *cascade* together in this order:
 - browser's default styles
 - external style sheet files (in a <link> tag)
 - internal style sheets (inside a <style> tag in the page's header)
 - inline style (the style attribute of the HTML element)
- For different properties, all matching selectors are applied
- In the case of a property conflict
 - each rule is assigned a weight
 - heaviest wins



Weight Algorithm

1. Find all declarations that apply to the element/
property
 - if none, then inherit
 - if no inheritance, use initial value
2. Sort by presence of '!important'
3. Sort by origin (author,user,browser)
 - author wins over user, user wins over browser
default
4. Sort by specificity of selector
 - more specific wins ('div p' wins over 'p')
5. Sort by order specified
 - latter specified wins



Semantic Elements

- Give meaning to the content they enclose
- Don't have any pre-defined formatting
- Benefits
 - Simplify editing and maintenance
 - Improve accessibility
 - http://www.youtube.com/watch?v=AmUPhEVWu_E
 - Search-engine optimizations
 - New features



Semantic Elements

<article>

<aside>

<figure>

<figcaption>

<footer>

<header>

<hgroup>

<nav>

<section>

<details>

<summary>

