

web engineering

basics of CSS

example for responsive de × barrach photography ×

← → C file:///C:/Users/moira/Desktop/WEB/barrach/index.html

barrach photography

HOME ABOUT ARTICLES

Wildlife in Motion



barrach photography

Capturing Motion

posted: 01 February 2013



In this article we write about using slow-shutter speed to capture motion. Here there will be a whole introduction to the article. What will go to the right of it? Well, let's wait and see ..

I'm adding a paragraph between the two that were already there to see how it will look. After that I will fix the navigation context and go on to work on the gallery sites.

For the moment I will add a bit more text to see how it looks when there is a war around. Ok - it doesn't wrap so will have to check how this is done. Next we can see how the layout is and maybe eventually actually write an article. [...]

ANTARCTICA ARCTIC

BIRDS GALAPAGOS

KENYA ZOOS

MORE ARTICLES

The Warp Factor
posted: 01 February 2013

In this article we write about using slow-shutter speed to capture motion. [...]

Safari Equipment
posted: 01 February 2013

For the moment I will add a bit more text to see how it looks when there is a war around. [...]

CONNECT

Downloads and prints of images as well as various other products are available at:

SmugMug

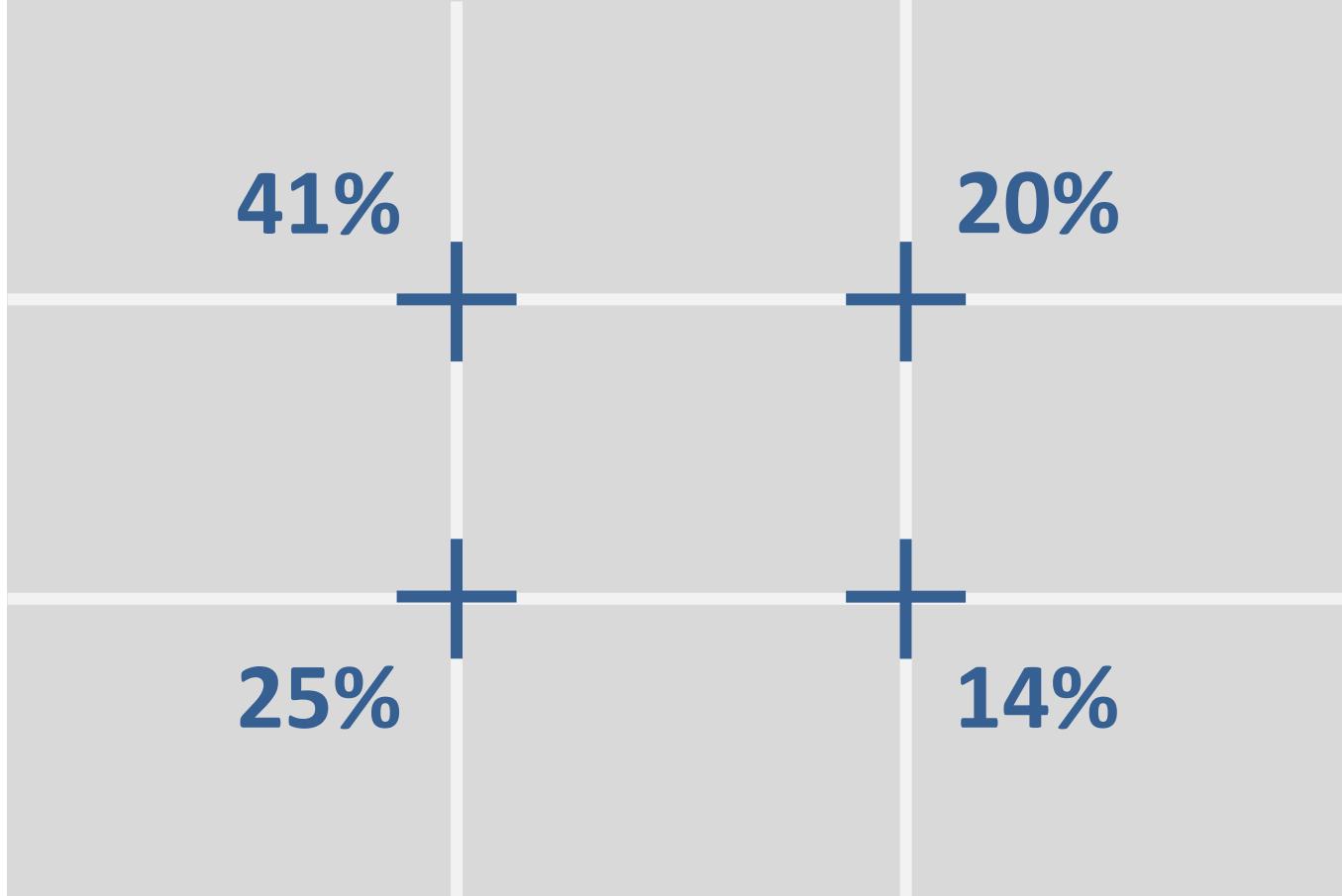
You can also follow me on Twitter and Facebook:

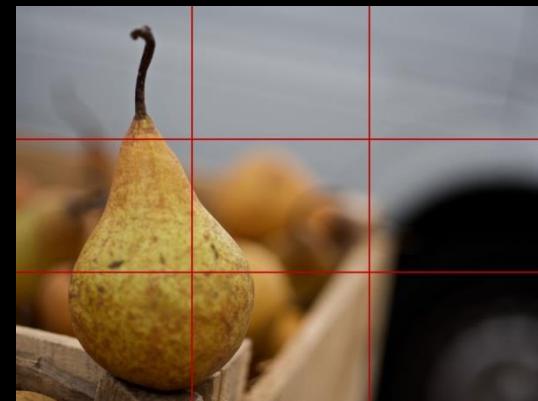
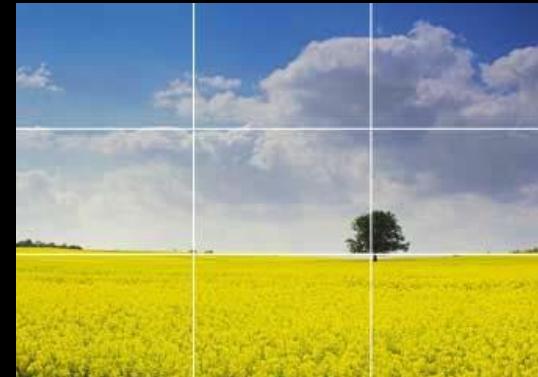
 

© barrach photography 2013

HOME ABOUT ARTICLES

rule of thirds





BBC - Homepage

www.bbc.co.uk

BBC News Sport Weather Travel Future Autos TV Radio More... Search

From BBC News

'Don't mess with me, little girl'

Venezuela's late leader Hugo Chavez was renowned the world over for his colourful rhetoric. The BBC takes a look at some of his most memorable moments.



Living In

Barcelona: Spanish soul

Experience life in this cosmopolitan city, where residents enjoy spectacular cuisine, inspiring architecture and contemporary culture all year round.

Culinary capitals: Cities with great food

Rio: Brazil's growing party city

Explore Mumbai like a local

News

EU fines Microsoft over web browser

The EU's competition regulator fines Microsoft 561 million euros (\$731m; £484m) after it failed to keep a promise that it would promote a choice of rival web browsers.



Syrian refugees reach one million

The number of people fleeing the conflict in Syria reaches one million, the UN refugee agency says, with neighbouring countries struggling to cope.

Bolshoi dancer 'confesses' to attack

Chinese anger at stolen baby murder

Snowstorm hits US Midwest states

Electronic fault slows Kenyan count

Rahul Gandhi: No plans to become PM

Business

Economic muddle of Chavez legacy

Samsung to acquire 3% stake in Sharp

Marketwatch (min delay 15 mins)

| Dow Jones | 14253.77 | ▲ 125.95 | 0.89% |
|-----------|----------|----------|-------|
| Nasdaq | 3224.13 | ▲ 42.10 | 1.32% |
| FTSE 100 | 6451.74 | ▲ 19.79 | 0.31% |
| Dax | 7948.05 | ▲ 77.74 | 0.99% |
| Cac 40 | 3793.86 | ▲ 6.67 | 0.18% |

Sport

Injured Swann upbeat about Ashes



England spinner Graeme Swann says he is confident he will be fit for the Ashes, despite being told he needs elbow surgery.

Sportsday - breaking sports news

Rain washes out first day of NZ-England Test

The best team lost, says Mourinho

Murray set for return to action

Power of Nature

Nikon



Windy, white desert

Despite being so remote and inhospitable that no humans have ever made it their home, Antarctica is hugely valuable to life on Earth. Experts reveal why.

► **The Amazon: The planet's green lungs**

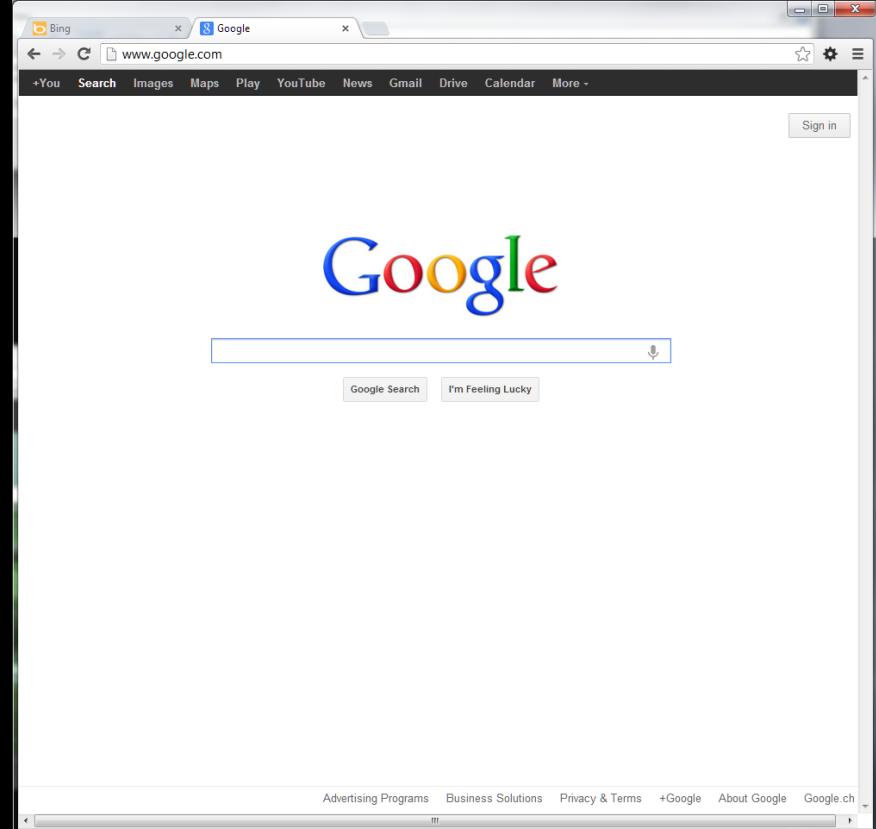
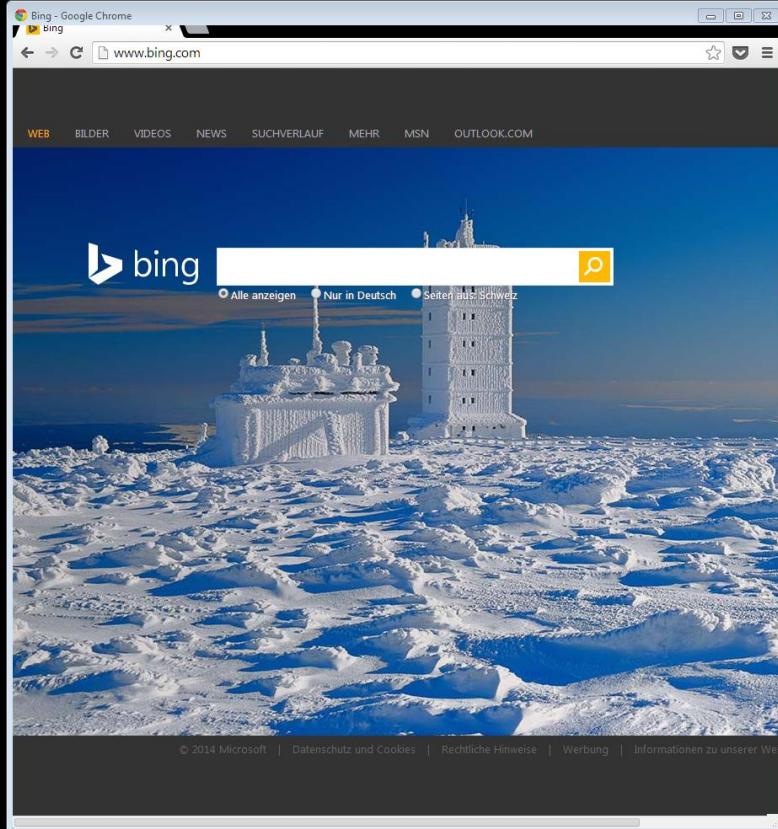
► **Coral reefs: The ocean's larder at risk**

► **The strange and magical Sundarbans**

Power of Art



A good beat

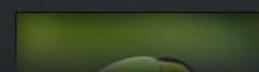
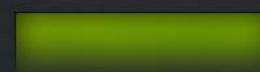
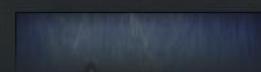
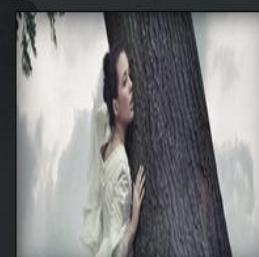




HOME > GALLERY

GALLERY

YOU CAN ADD A SUBHEAD DESCRIPTION HERE



ABOUT

PORTFOLIO

BLOG

GYLLERY

OUR MISSION

AFFILIATES



header

navigation

slideshow

galleries

lead article

connect

more articles

footer

header: The top navigation bar containing the site name "barrach photography" and links for "HOME", "ABOUT", and "ARTICLES".

navigation: The top right navigation bar with "HOME", "ABOUT", and "ARTICLES" links.

slideshow: A large image of a white owl in flight, labeled "Wildlife in Motion".

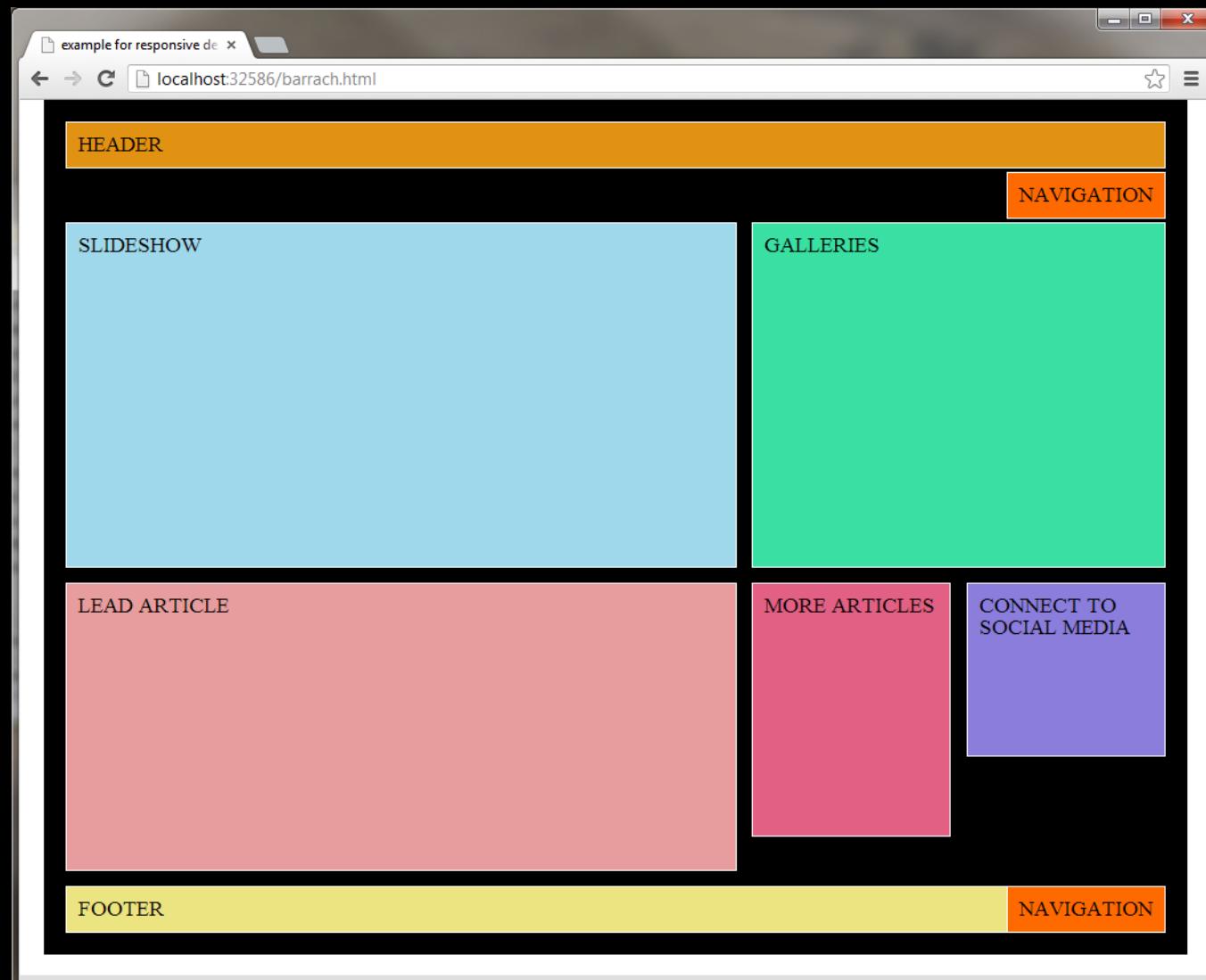
galleries: A grid of six smaller images representing different locations: ANTARCTICA (penguin), ARCTIC (polar bear), BIRDS (owl close-up), GALAPAGOS (tortoise), KENYA (cheetah), and ZOOS (leopard).

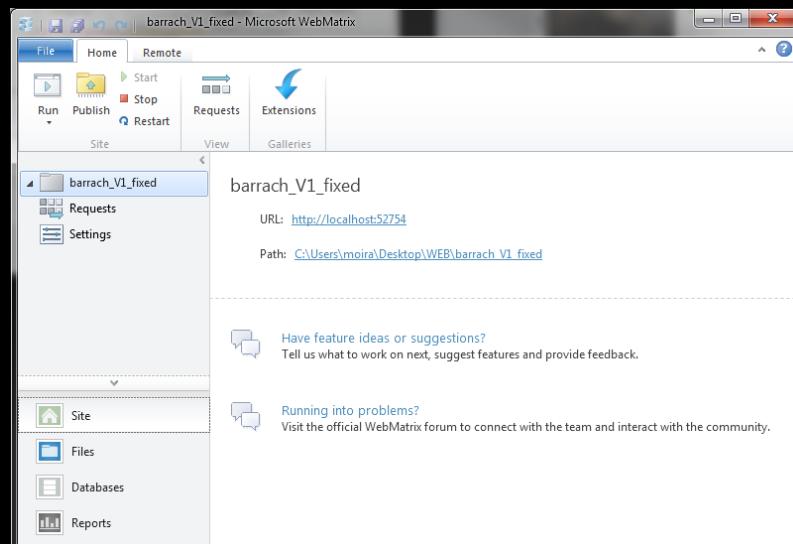
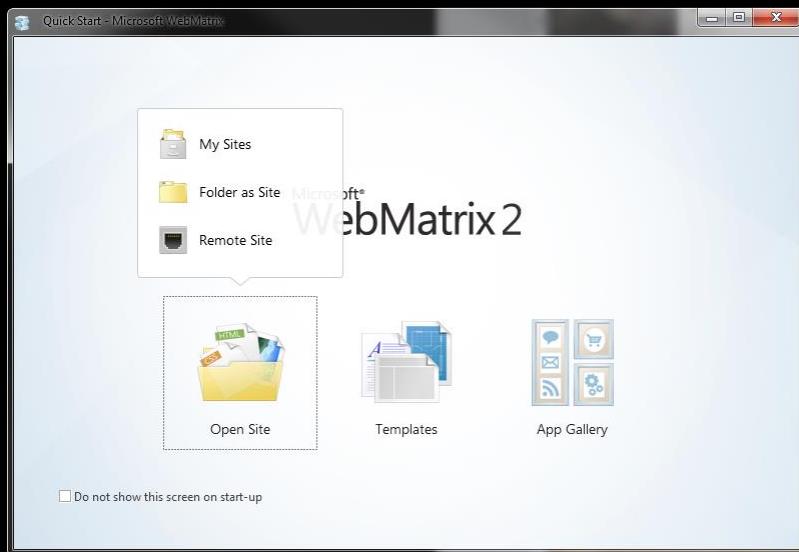
lead article: A featured article titled "Capturing Motion" posted on 01 February 2013. It includes a cheetah image and some introductory text.

connect: A sidebar section titled "CONNECT" featuring "SmugMug" and social media links for Twitter and Facebook.

more articles: A sidebar section titled "MORE ARTICLES" listing "The Warp Factor" and "Safari Equipment", both posted on 01 February 2013, with brief descriptions.

footer: The bottom navigation bar with "HOME", "ABOUT", and "ARTICLES" links, along with a copyright notice: "© barrach photography 2013".





HTML/CSS Editors

can use WebMatrix integrated web development environment

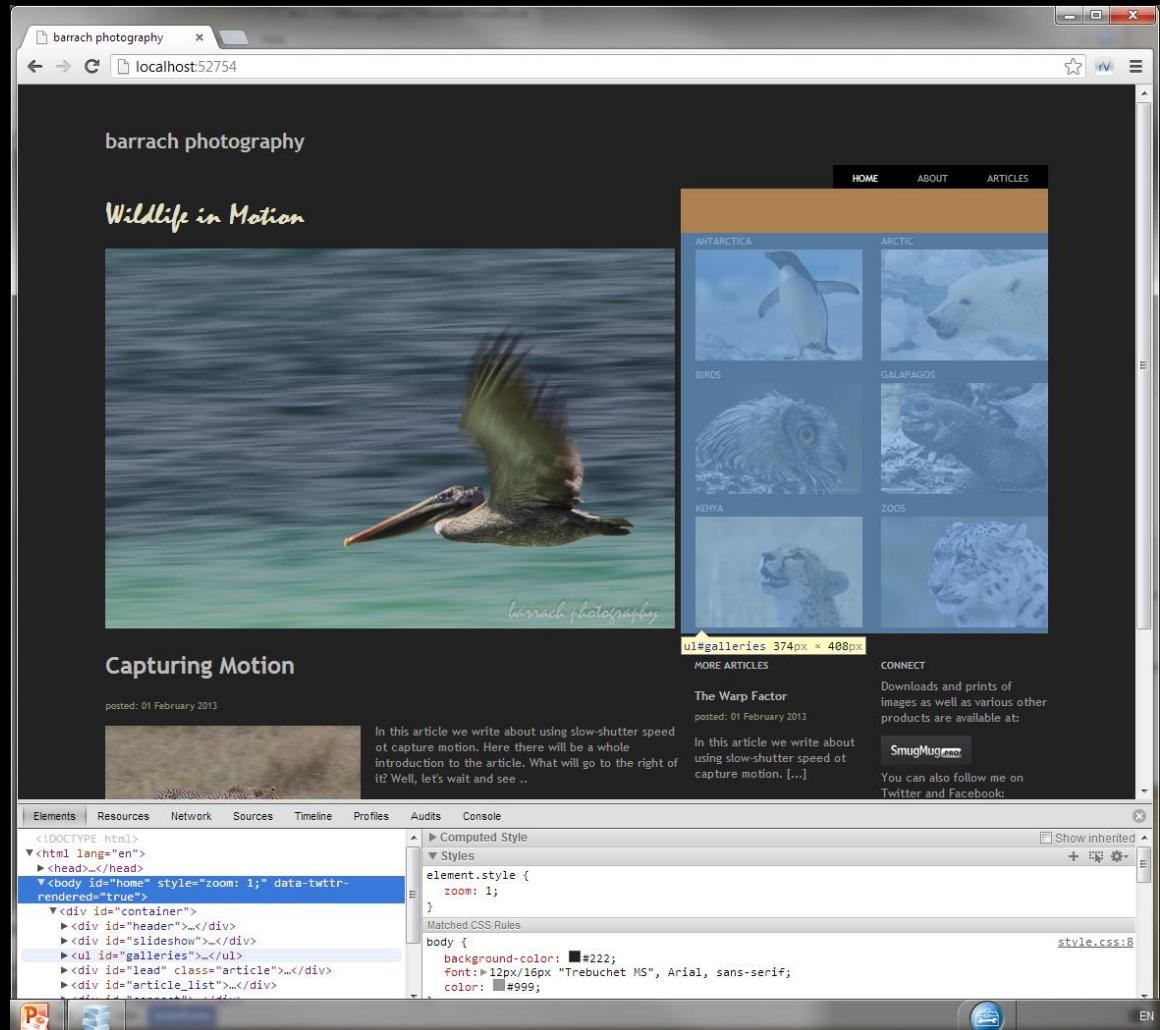
The screenshot shows the Microsoft WebMatrix 2 interface with the code editor open for the 'style.css' file. The code is as follows:

```
1 @import url("reset.css");
2
3 /* FIXED LAYOUT VERSION 1 */
4
5 /* general styles -----
6
7 body { background-color: #222; font: 12px/16px "Trebuchet MS", Arial, sans-serif; color: #ccc; }
8
9 /* old font colour c4bd97 */
10
11 h1 { font-family: "Trebuchet MS", Arial, sans-serif; font-size: 175%; color: #ae3030; }
12 h2 { font-family: "Mistral", "Trebuchet MS", Arial, sans-serif; font-size: 150%; color: #ae3030; }
13 h3 { font-family: "Trebuchet MS", Arial, sans-serif; font-size: 200%; color: #ae3030; }
14 h4 { font-family: "Trebuchet MS", Arial, sans-serif; font-size: 80%; text-align: center; color: #ccc; }
15 h5 { font-family: "Trebuchet MS", Arial, sans-serif; font-size: 100%; color: #ccc; }
16 h6 { font-family: "Trebuchet MS", Arial, sans-serif; font-size: 120%; color: #ccc; }
```

At the bottom of the code editor, there are 'Find Results' and 'Error List (4)' buttons.

browser developer tools

for example
Google Chrome



HTML and presentation

mixes content, structure and presentation

criticised by graphic designers

- fixed set of tags

- limited graphic capabilities

- page-focussed rather than site-focussed in terms of "look and feel"

- tables became basis for layout

HTML 4.0 released in 1997

better separation of content and presentation through introduction of Cascading Style Sheets (CSS)

HTML 5.0 (Draft)

new structural elements, e.g. section, article, header, footer,

new elements for embedding media, e.g. audio and video

Cascading Style Sheets (CSS)

style sheet defines a set of rules that specify to a browser how an HTML document should be rendered

each rule consists of
- selector
- style declaration

can be included directly in HTML documents or referenced in head of HTML document

```
body {  
    background-color: black;  
}  
  
h1 {  
    font-family: arial;  
    font-size: 20pt;  
    color: blue;  
}  
  
p {  
    font-family: arial;  
    font-size: 12pt;  
    color: white;  
}
```

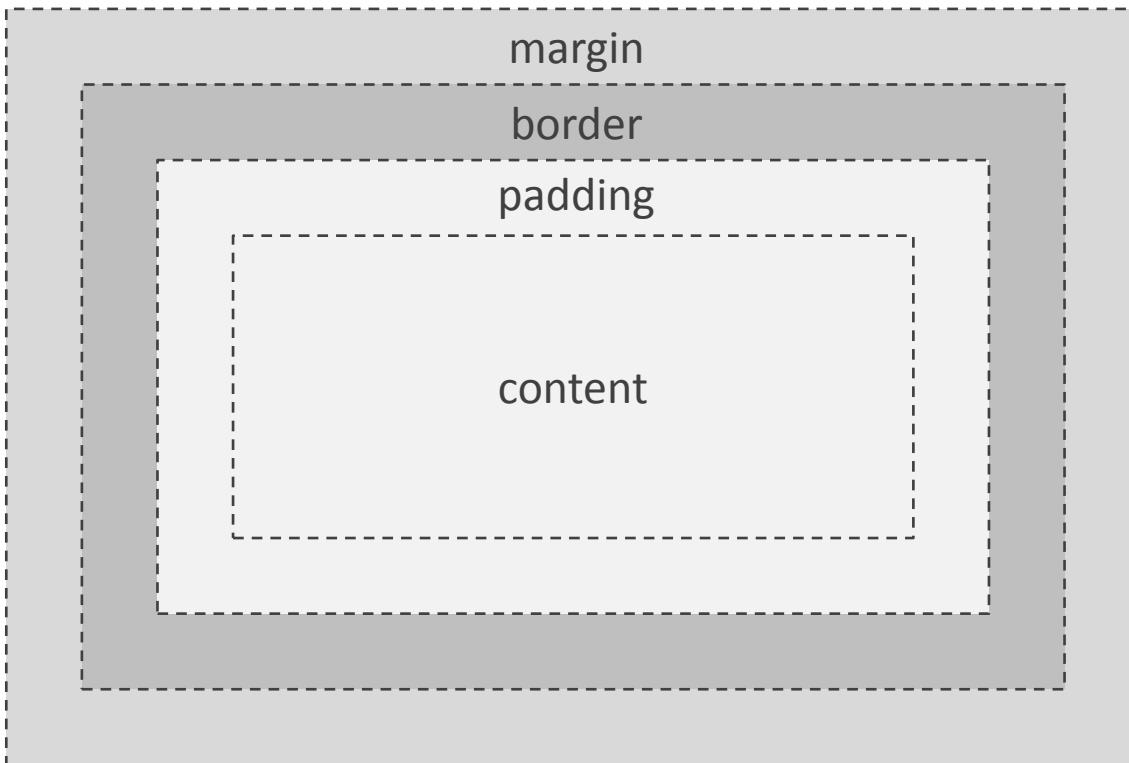
reset.css

removes inconsistent default styling of browsers

import at top of CSS stylesheet

```
html, body, div, span, applet, object, iframe, h1, h2, h3,  
h4, h5, h6, p, blockquote, pre, a, abbr, acronym, address,  
big, cite, code, del, dfn, em, font, img, ins, kbd, q, s,  
samp, small, strike, strong, sub, sup, tt, var, b, u, i,  
center, dl, dt, dd, ol, ul, li, fieldset, form, label,  
legend, table, caption, tbody, tfoot, thead, tr, th, td {  
    margin: 0; padding: 0; border: 0; outline: 0;  
    font-size: 100%; vertical-align: baseline;  
    background: transparent; }  
  
body { line-height: 1; }  
ol, ul { list-style: none; }  
  
....
```

box model

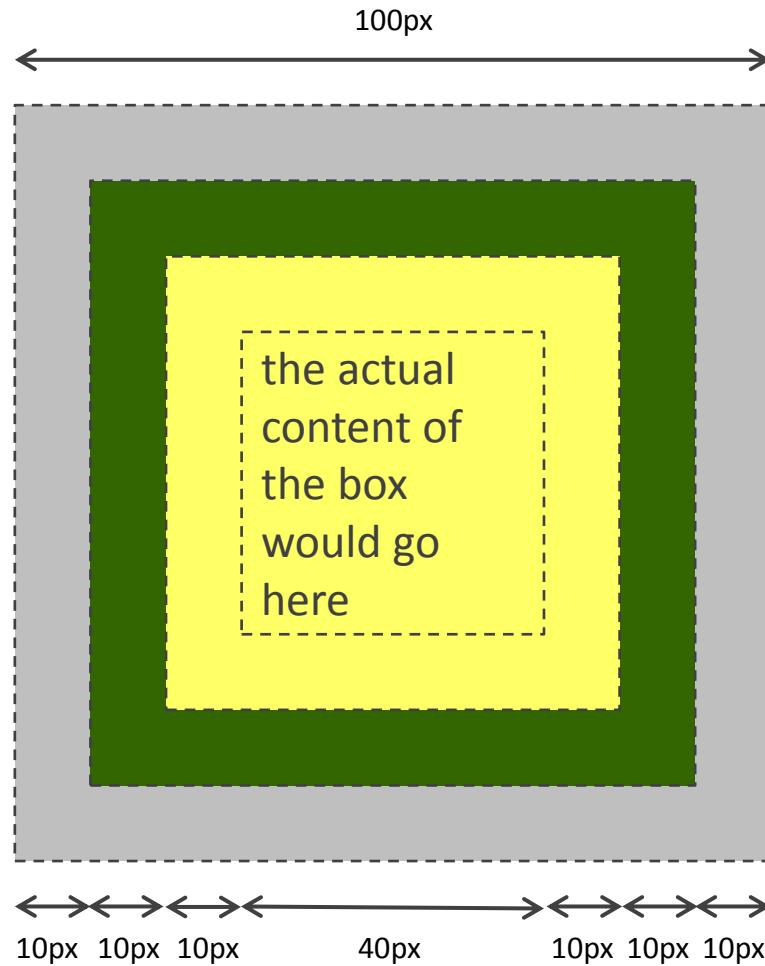


background applied to content and padding

width and height of an element refers only to the content area

calculating widths

```
#box {  
    margin: 10px;  
    border: 10px solid #683;  
    padding: 10px;  
    width: 40px;  
    height: 40px;  
    background-color: #fd0;  
}
```



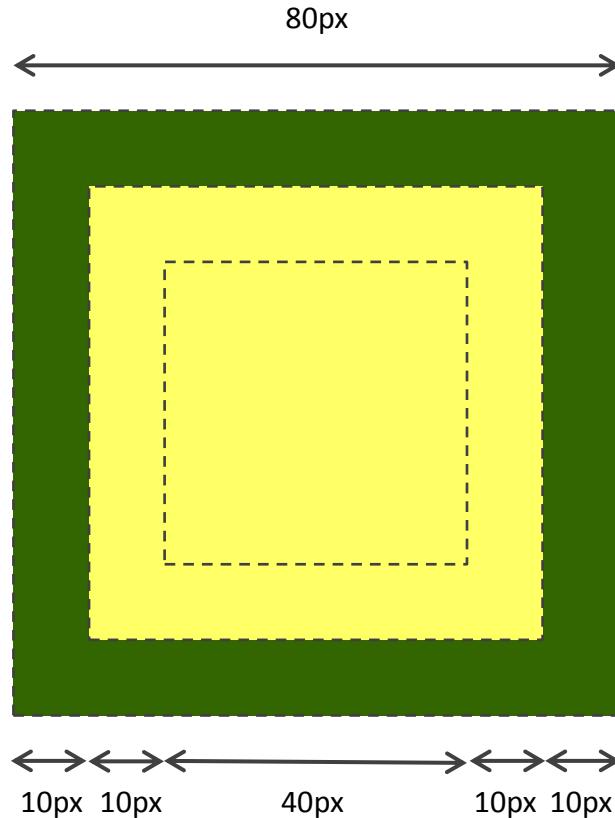
outline

```
#box {  
  margin: 10px;  
  outline: 10px solid #683;  
  padding: 10px;  
  width: 40px;  
  height: 40px;  
  background-color: #fd0;  
}
```

unlike border, outline is drawn over an element's box so no effect on size

useful in debugging as no effect on layout

not supported IE7 and below



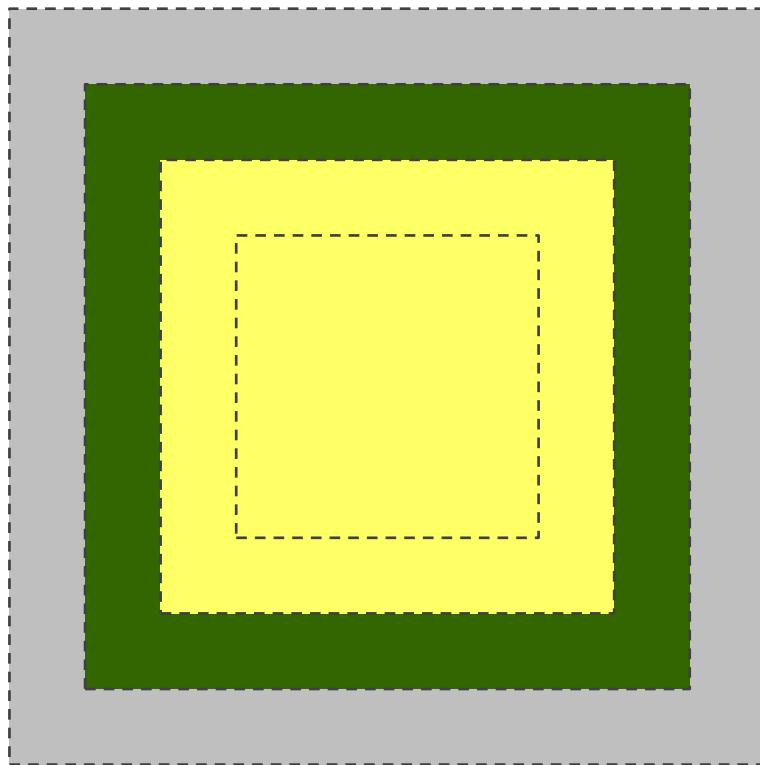
other box models

older versions of IE used a non-standard box model

width of element is sum of content, padding and borders

CSS3 box-sizing property
allows box model to be
specified but not widely used

tip: avoid adding padding to an element with a defined width and add it to parents or children instead



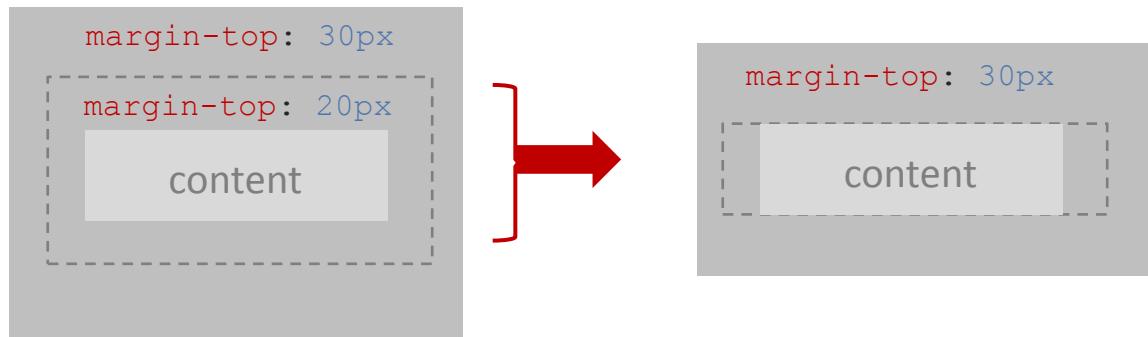
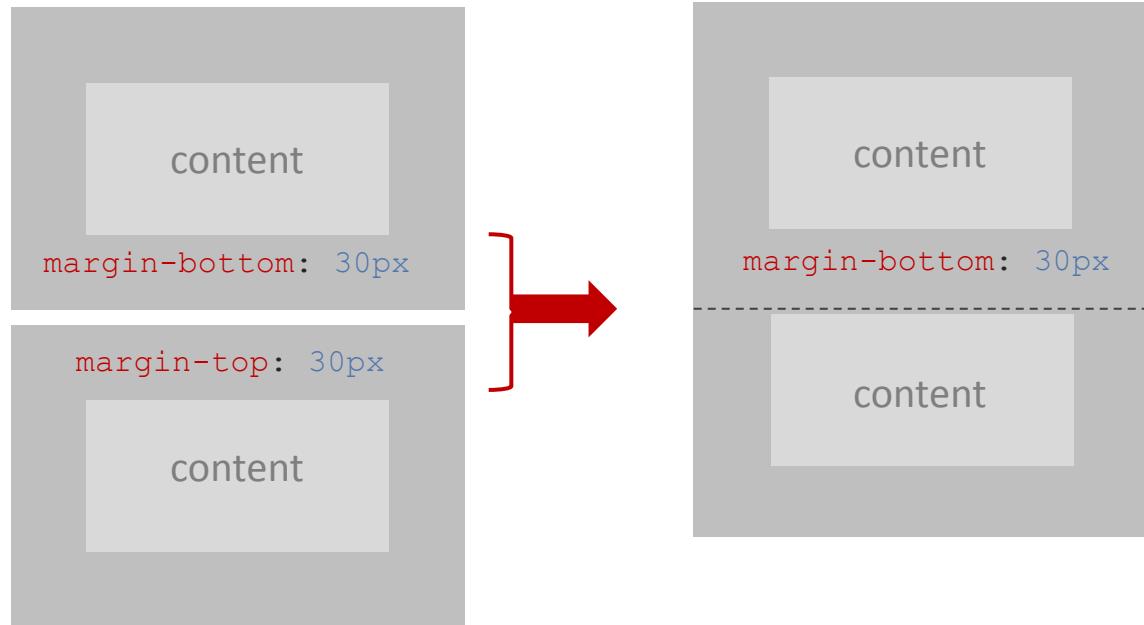
A horizontal line with arrows at both ends, divided into segments by double-headed arrows below it. The segments are labeled with widths: 10px, 10px, 10px on the left; 40px in the middle; and 10px, 10px, 10px on the right.

width: 80px;

margin collapsing

two or more adjacent
vertical margins m_1, m_2
collapse to form a single
margin

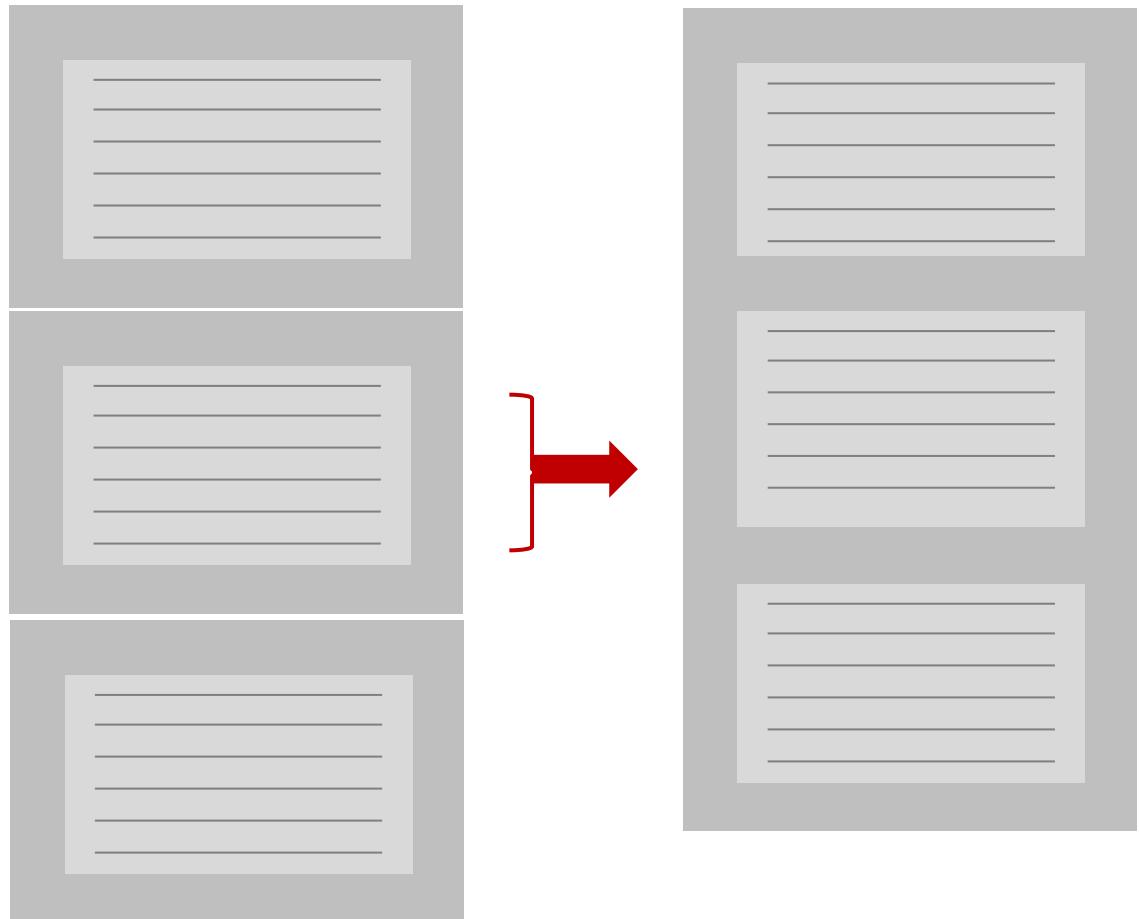
height of collapsed
margin is $\max(m_1, m_2)$



use of margin collapsing

used to achieve
consistent spacing
between paragraphs

only happens in normal
flow of document and not
with inline, floated or
absolutely positioned
boxes



block and inline elements

block elements take up the full width available with a line break before and after

```
<h1> <p> <div> <li>
```

inline elements only take up as much width as required

```
<span> <a> <img>
```

can be changed using display

```
li { display:inline; }
```

```
span { display:block; }
```

`<div>` defines a section of a document at the block level
`` defines a section of a document at the inline level

inline-block ?

this specifies that an element should be placed as an inline element but behaves as a block element

what does that mean?

it means that you can still set properties such as width, height, paddings, vertical margins etc.

```
li { display:inline-block; }
```

Home About Articles

```
<ul id="nav">
  <li><a href="index.html">Home</a></li>
  <li><a href="about.html">About</a></li>
  <li><a href="about.html">Articles</a></li>
</ul>

#nav li {
  display: inline-block;
  padding: 10px;
  background-colour: #777;
}
#nav a { text-decoration: none; color: #fff; }
```

“the devil is in the detail”

*why are there spaces
between the menu tabs?*

Home About Articles

how can I get rid of them?

Home About Articles

needs some way to get
rid of the spaces
between elements e.g.
putting all elements
together on single line or
commenting them out

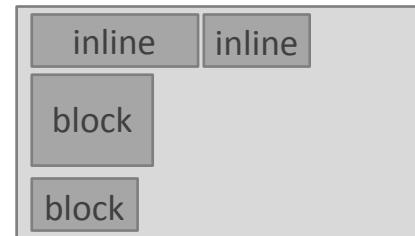
```
<ul id="nav">
  <li><a href="index.html">Home</a></li><!--
  --><li><a href="about.html">About</a></li><!--
  --><li><a href="about.html">Articles</a></li>
</ul>

<ul id="nav">
  <li><a href="index.html">Home</a>
  </li><li><a href="about.html">About</a>
  </li><li><a href="about.html">Articles</a></li>
</ul>
```

basic positioning schemes

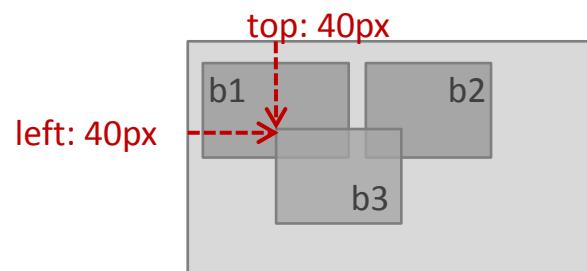
normal flow

follows order of elements in HTML document



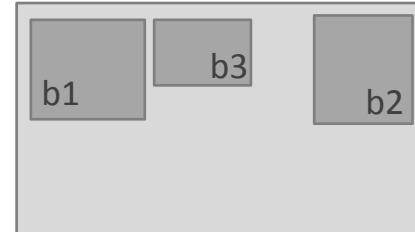
absolute

takes element out of flow and positions it relative to nearest positioned ancestor



floats

takes elements out of flow and floats them right or left to be adjacent to edge or other floated elements

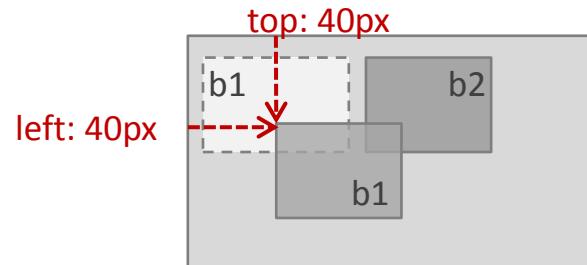


relative positioning

relative

shift an element relative to its assigned position

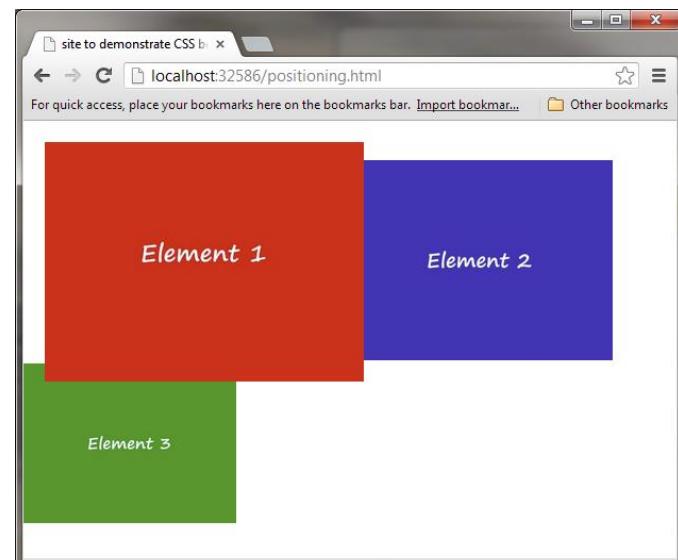
unlike absolute positioning,
element not taken out of
normal document flow



```
#element1 { display: inline; position: relative;
            top: 20px; left: 20px; }
#element1 img { width: 300px; }

#element2 { display: inline; }
#element2 img { width: 250px; }

#element3 img { width: 200px; }
```



absolute and relative

absolute

takes element out of flow and positions it relative to **nearest positioned ancestor**

give an element a relative position to position a nested element absolutely within it

Element 1

norrie@inf.ethz.ch

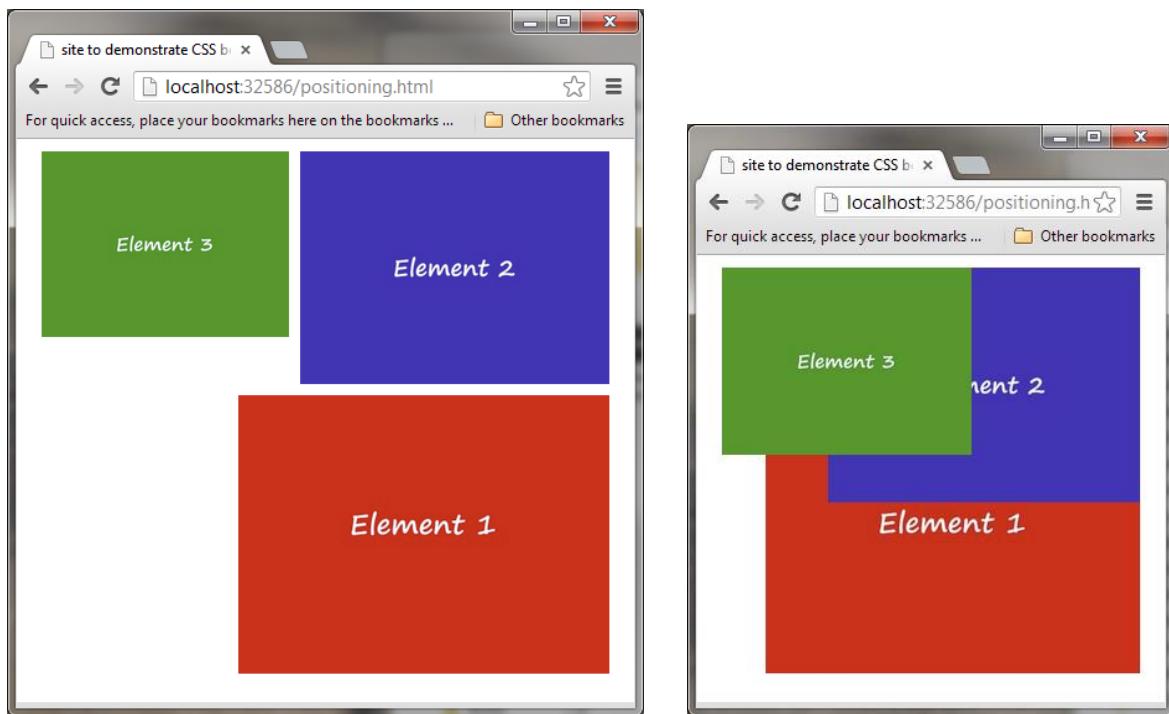
```
<div id="element1">
  
  <p class="contact">norrie@inf.ethz.ch</p>
</div>
```

```
#element1 { float: right; position: relative; }
#element1 .contact {
  position: absolute; right: 1em; bottom: 1em; text-align: right; }
```

absolute positioning

elements taken
out of normal flow
and hence have no
effect on boxes in
normal flow

resizing can result
in overlap



```
#element1 { position: absolute; bottom: 20px; right: 20px; }  
#element2 { position: absolute; top: 10px; right: 20px; }  
#element3 { position: absolute; top: 10px; left: 20px; }
```

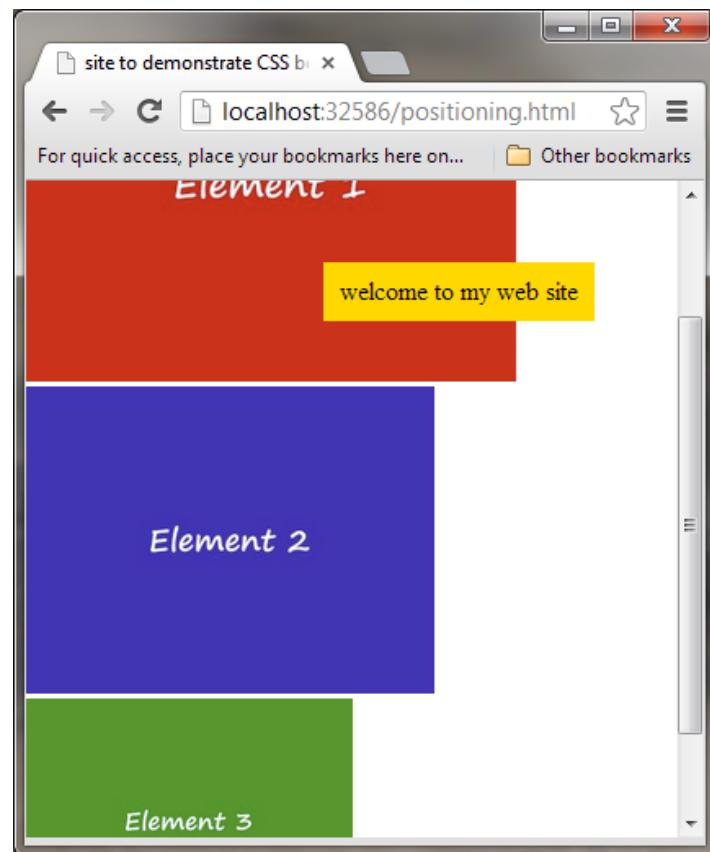
fixed positioning

similar to absolute positioning
but relative to the viewport

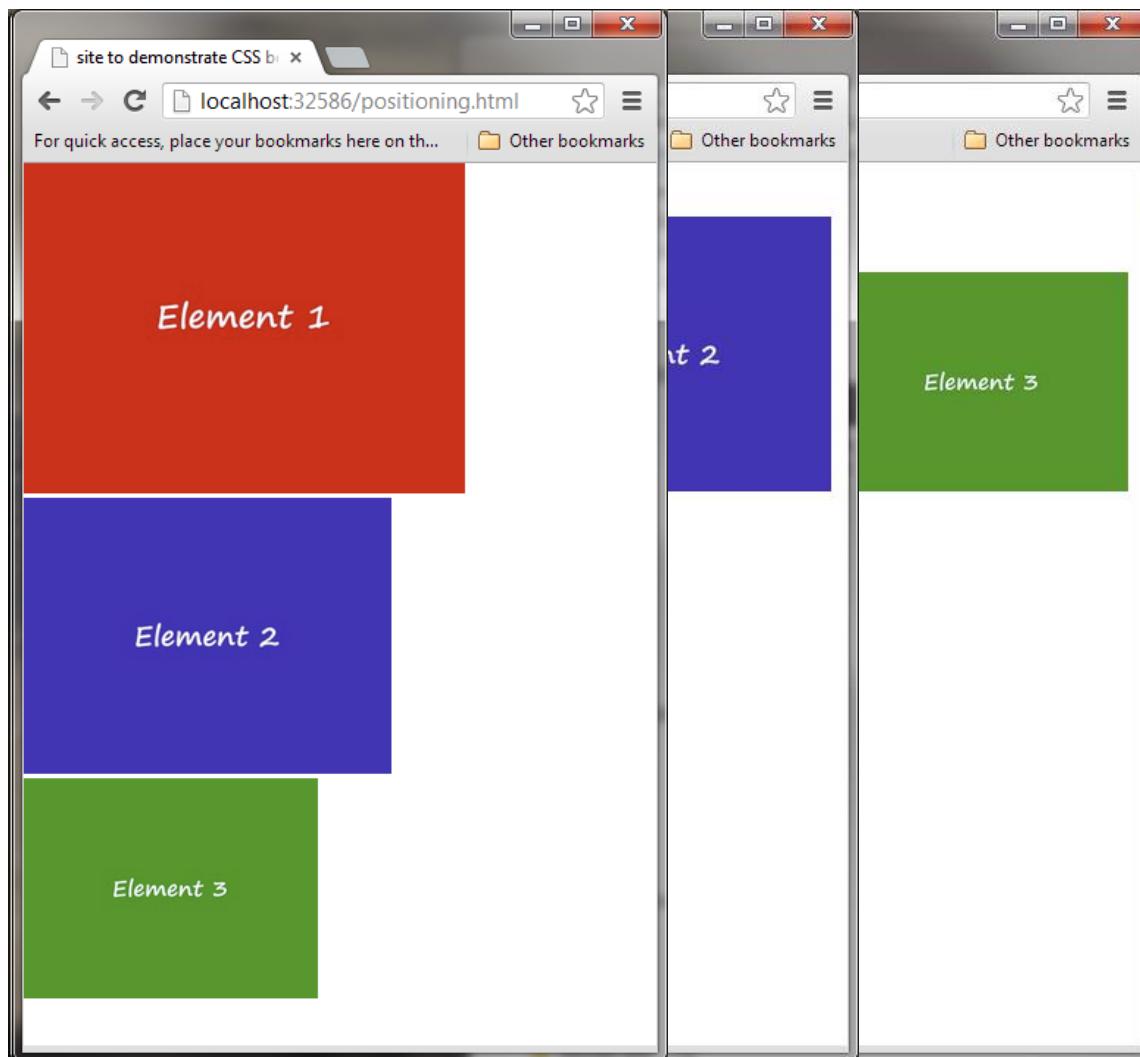
stays in fixed position regardless
of scrolling

```
<p id="hello">welcome to my web site</p>

#hello {
  position: fixed; top: 50px; right: 50px;
  padding: 10px; background-color: #ffd800;
}
```



displaying inline



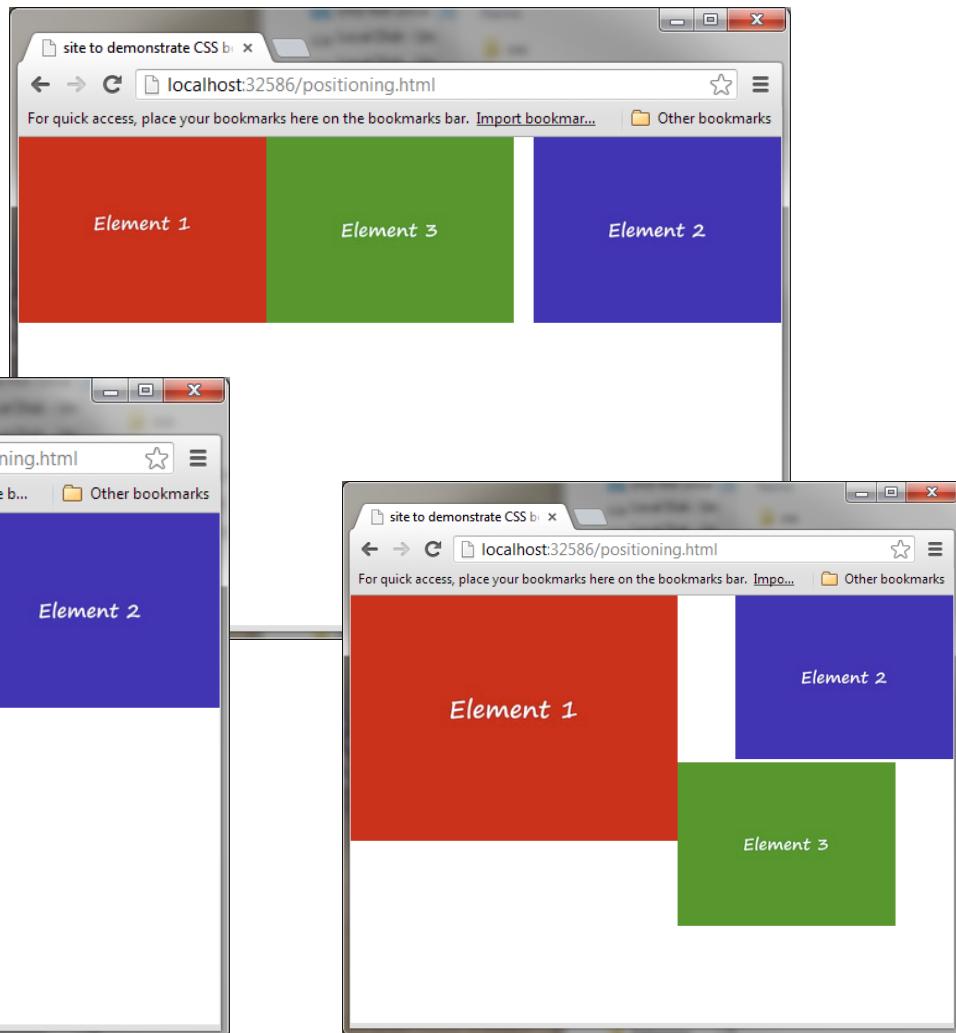
```
#element1 { display: inline; }  
#element1 img { width: 300px; }
```

```
#element2 { display: inline; }  
#element2 img { width: 250px; }
```

```
#element3 { display: inline; }  
#element3 img { width: 200px; }
```

floating

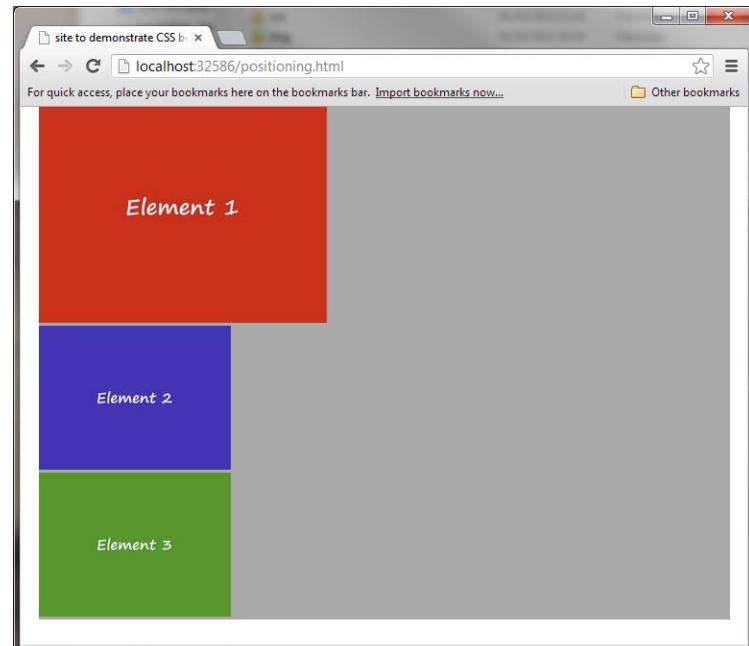
```
#element1 { float: left; }  
#element2 { float: right; }  
#element3 { float: left; }
```



container elements with normal flow

```
<div id="container">
  <div id="element1">
    
  </div>
  <div id="element2">
    
  </div>
  <div id="element3">
    
  </div>
</div>
```

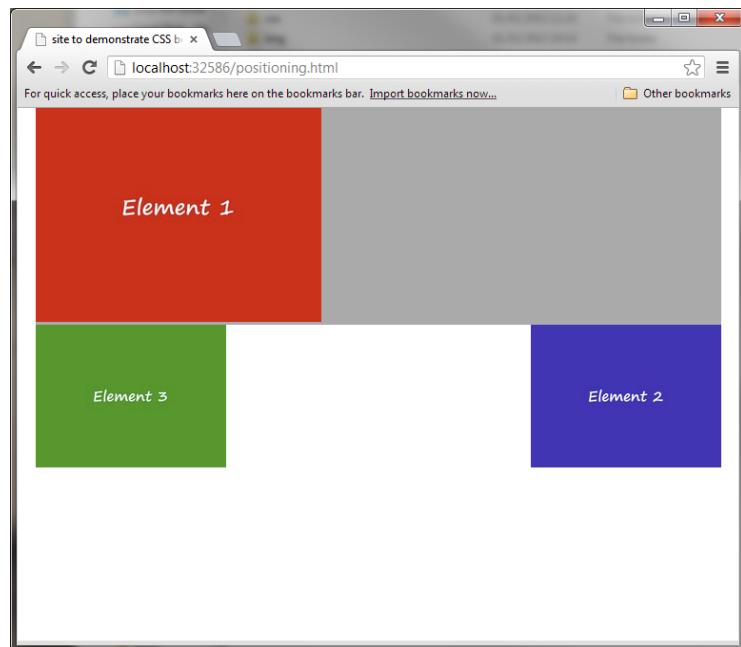
```
#container {
  width: 720px; margin: auto;
  background-color: #aaa;
}
#element1 { }
#element2 { }
#element3 { }
```



container elements with floats

```
<div id="container">
  <div id="element1">
    
  </div>
  <div id="element2">
    
  </div>
  <div id="element3">
    
  </div>
</div>
```

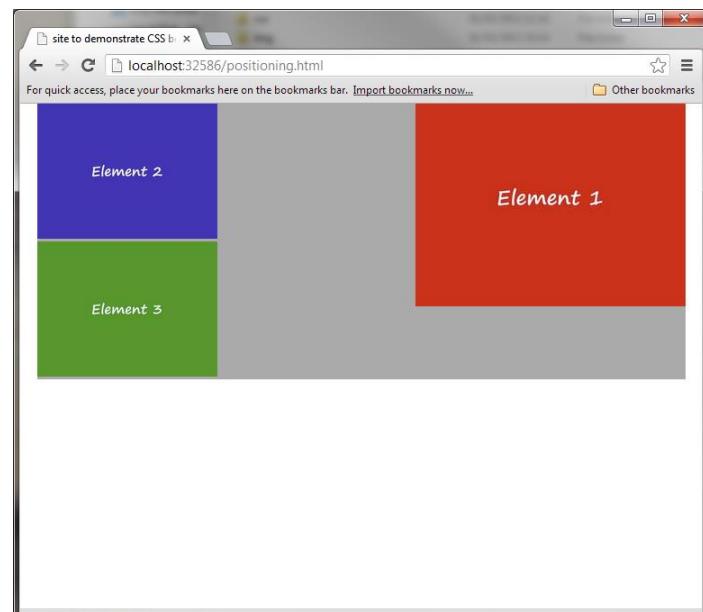
```
#container {
  width: 720px; margin: auto;
  background-color: #aaa;
}
#element1 { }
#element2 { float: right; }
#element3 { float: left; }
```



container elements mixing normal flow and floats

```
<div id="container">
  <div id="element1">
    
  </div>
  <div id="element2">
    
  </div>
  <div id="element3">
    
  </div>
</div>
```

```
#container {
  width: 720px; margin: auto;
  background-color: #aaa;
}
#element1 {float: right; }
#element2 { }
#element3 { }
```



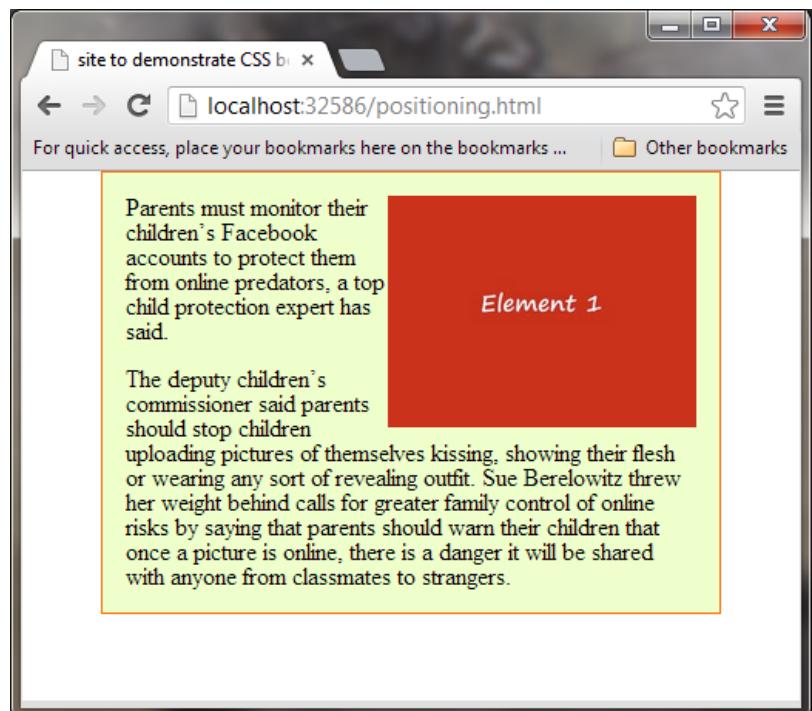
text elements and floats

text elements behave differently
and flow round floated elements

original use of floats

```
#container {  
    width: 400px; margin: auto;  
    border: 1px solid #ff6a00;  
}  
  
.news { background-color: #efc;  
    padding: 15px; }  
.news img { width: 200px;  
    float: right; }  
  
.news p { padding-top: 15px; }  
.news p:first-of-type { padding: 0; }
```

```
<div id="container">  
    <div class="news">  
          
        <p>Parents must monitor .... </p>  
        <p>The deputy .... </p>  
    </div>  
</div>
```



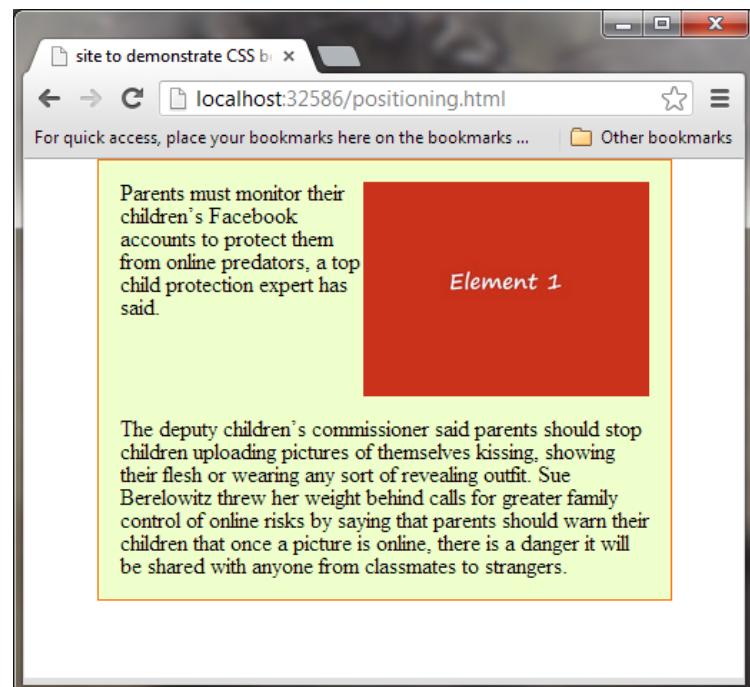
preventing flow around floated elements

what if we want to stop text flowing round a floated element?

clear property indicate which sides of a box should not be next to a floated element

```
#container {  
    width: 400px; margin: auto;  
    background-color: #aaa;  
}  
  
.news { background-color: #efc;  
    padding: 15px; }  
.news img { width: 200px;  
    float: right; }  
  
.news p { padding-top: 15px; }  
.news p:first-of-type { padding: 0; }  
.news p:last-of-type { clear: right; }
```

```
<div id="container">  
    <div class="news">  
          
        <p>Parents must monitor .... </p>  
        <p>The deputy .... </p>  
    </div>  
</div>
```

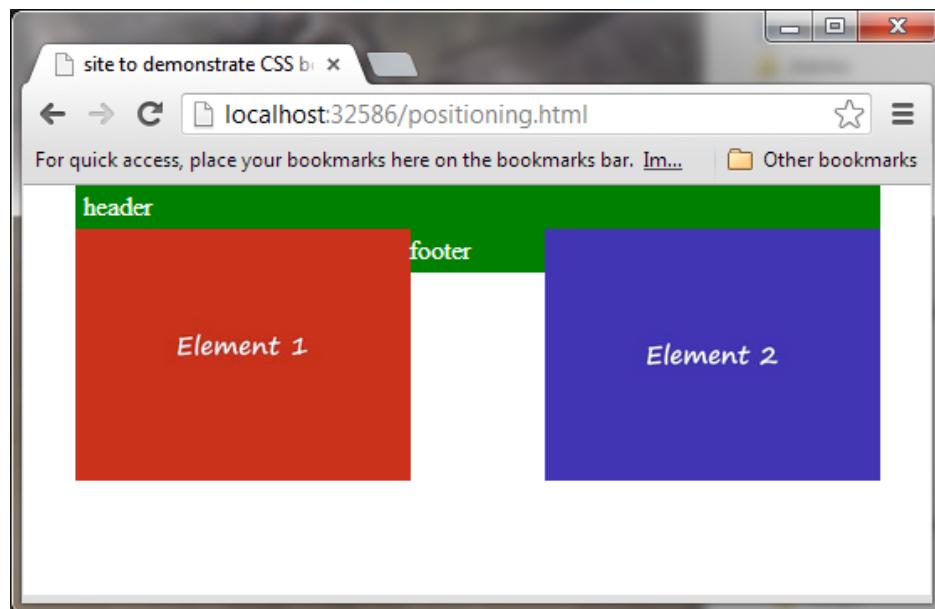


classic layout problem

what's gone wrong here?

```
<div id="container">
  <div id="header">
    <p>header</p>
  </div>
  <div id="element1">
    
  </div>
  <div id="element2">
    
  </div>
  <div id="footer"><p>footer</p>
  </div>
</div>
```

```
#container { width: 480px; margin: auto;
             background-color: yellow; }
#element1 { float: left; }
#element2 { float: right; }
#header, #footer { background-color: green;
                   color: white; padding: 5px; }
```



where is the yellow background ?

why is footer not at the bottom?

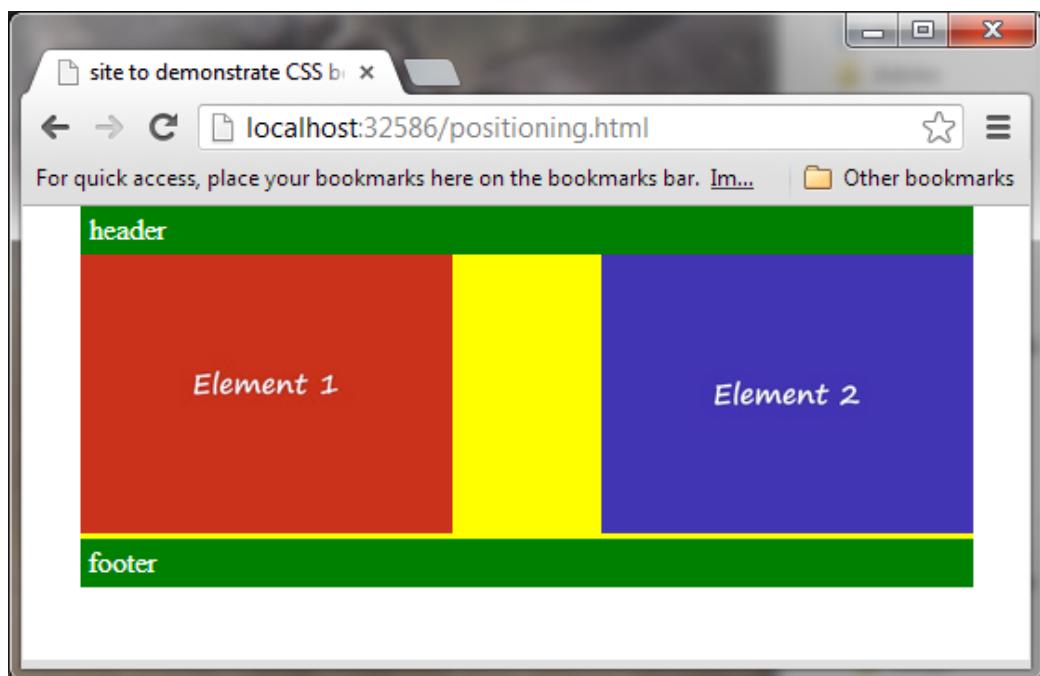
using clear to fix the problem

use clear to specify that the footer box should not be adjacent to a floated box

required vertical space added to normal flow and yellow background appears

```
<div id="container">
  <div id="header">
    <p>header</p>
  </div>
  <div id="element1">
    
  </div>
  <div id="element2">
    
  </div>
  <div id="footer"><p>footer</p>
  </div>
</div>
```

```
#container { width: 480px; margin: auto;
             background-color: yellow; }
#element1 { float: left; }
#element2 { float: right; }
#header, #footer { background-color: green;
                   color: white; padding: 5px; }
#footer { clear: both; }
```

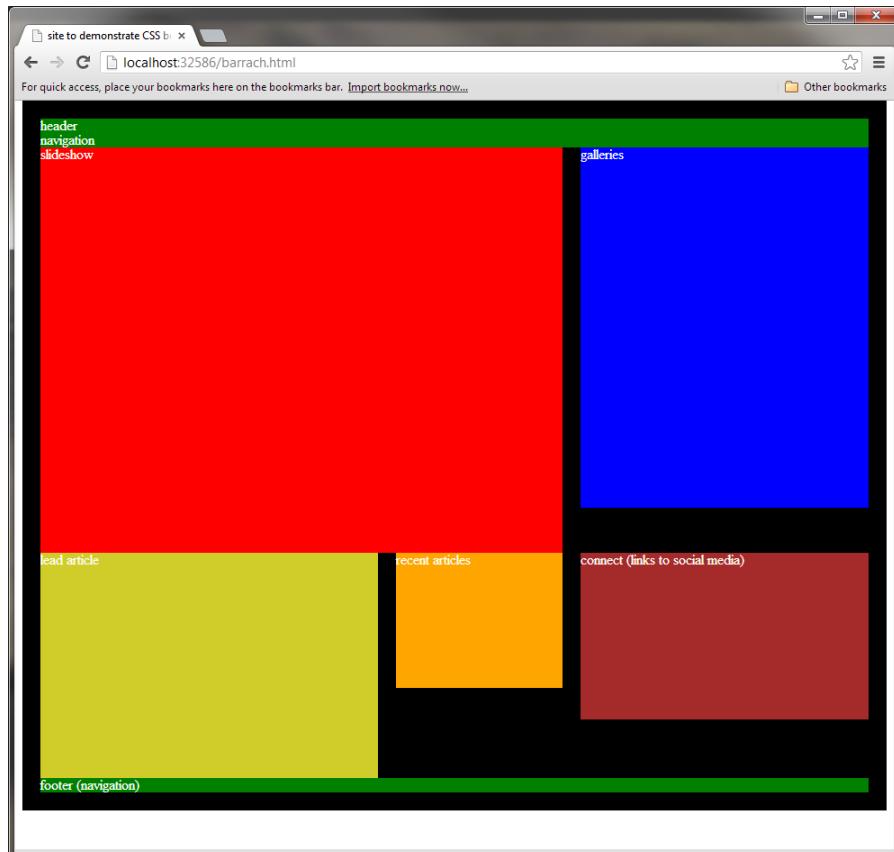


development process

initial design may be done on paper or using Photoshop

first stage is to identify main elements and their layout

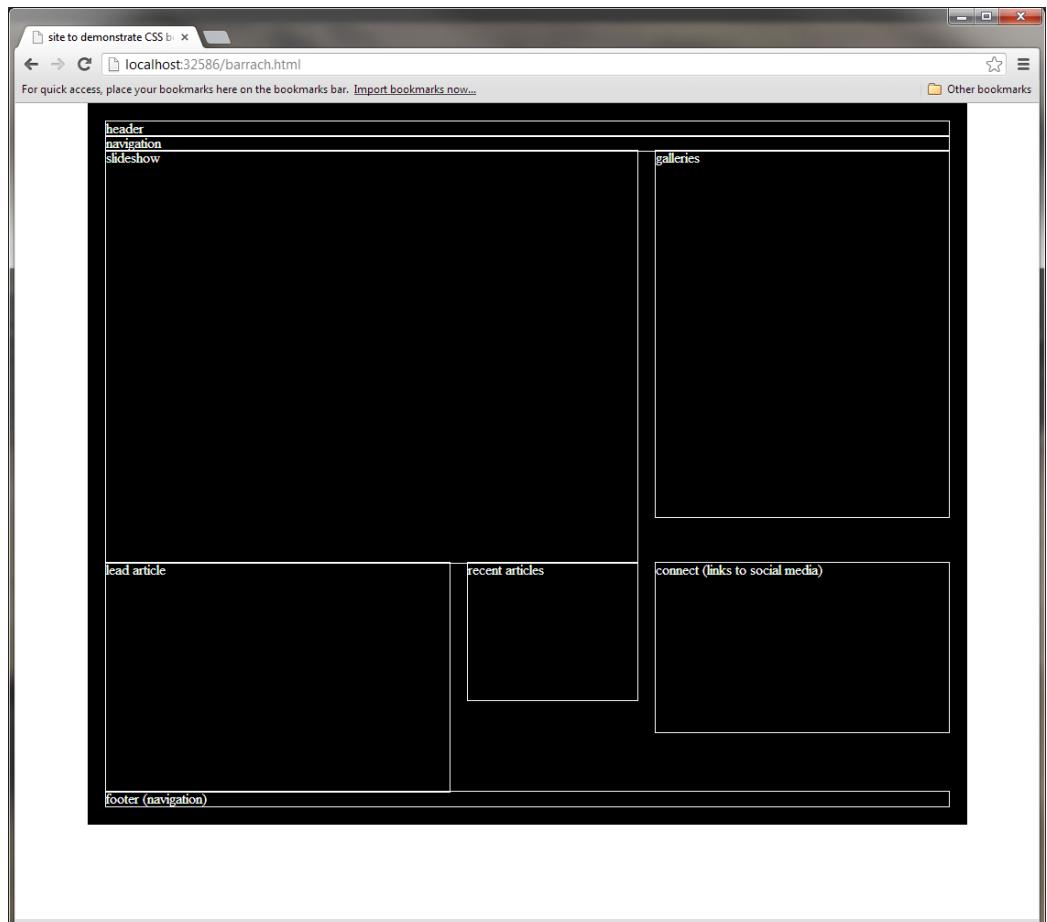
even with browser development tools it can be useful to colour elements so you really see the boxes distinct from the background and each other



development process . . .

could of course use a general wireframing tool or do it yourself

important to remember to use outlines instead of borders



let's now look at
an example of a
simple news site
to explain CSS
selectors

page to demonstrate CSS × localhost:32586/selectors.html For quick access, place your bookmarks here on the bookmarks bar. Import bookmarks now... Other bookmarks

WE News

HOME NEWS SPORTS

Face of Richard III to be revealed

The face of King Richard III is set to be unveiled to the world after a skeleton found under a council car park was confirmed as that of the last Plantagenet king.

A computer image showing what the monarch might have looked like is to be released by the Richard III Society on Tuesday morning after experts said the skeleton unearthed in Leicester was proven "beyond reasonable doubt" to be that of the king who died in the Battle of Bosworth in 1485.

The image is based on a CT scan taken by experts at the University of Leicester, who discovered the king's skeleton during an archaeological dig last September with the help of the society.

Richard III's skeleton was found in the remains of the choir of the Greyfriars church, which now lies under a social services car park in the city. The facial reconstruction will be unveiled to the media at the Society of Antiquaries at Burlington House in Piccadilly, London, at 10am.

University of Leicester academics announced on Monday that tests had established that the skeleton found under a car park in Leicester was that of the slain Richard III, who ruled England from 1483 to 1485. Richard Buckley, the lead archaeologist on the project at the University of Leicester, said that his team had proved "beyond reasonable doubt" that the bones were those of the last Plantagenet king.



Skull of Richard III

France may begin Mali pull-out next month says foreign minister

French troops may start pulling out of their anti-extremist operation in Mali as early as next month, handing over to a still-developing African force.



French Foreign Minister Laurent Fabius

Tsunami alert after Solomon Islands earthquake

A magnitude 8.0 earthquake off the Solomon Islands has sparked a tsunami warning for the island nations of the south Pacific, with houses reported damaged in the Solomons.



Pacific-Tsunami-Warning Centre in Hawaii

Federal Reserve hacked

The US Federal Reserve bank has confirmed one of its internal websites was broken into by hackers after the hacktivist group Anonymous was claimed to have stolen details of more than 4,000 bank executives.



Federal Reserve hacked

Home News Sports

```

<body>
  <div id="container">
    <div id="header"> .... </div>
    <ul class="nav">.... </ul>
    <div id="primary">
      <div class="news">
        <div class="figure">
          
          <p class="caption">Skull of Richard III</p>
        </div>
        <h2>Face of Richard III to be revealed</h2>
        <p> .....</p>
      </div>
    </div>
    <div id="secondary">
      <div class="news"> .... </div>
      <div class="news"> .... </div>
      <div class="news"> .... </div>
    </div>
    <div id="footer"> ..... </div>
  </div>
</body>

```

page to demonstrate CSS ×

localhost:32586/selectors.html

For quick access, place your bookmarks here on the bookmarks bar. [Import bookmarks now...](#)

WE News

HOME NEWS SPORTS

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Tsunami alert after Solomon Islands earthquake

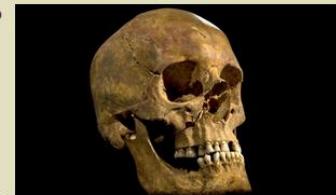
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Pacific-Tsunami-Warning Centre in Hawaii

Federal Reserve hacked

The US Federal Reserve bank has confirmed one of its internal "systems" was broken into by hackers after the hacktivist group Anonymous was claimed to have stolen details of more than 4,000 bank executives.

Federal Reserve hacked






norrie@inf.ethz.ch

```

body { background-color: #aaa; font-family: 'Times New Roman'; ... }
h1 { font-family: Arial; font-size: 300%; }
h2 { font-family: Arial; font-size: 150%; color: #861d1d; }

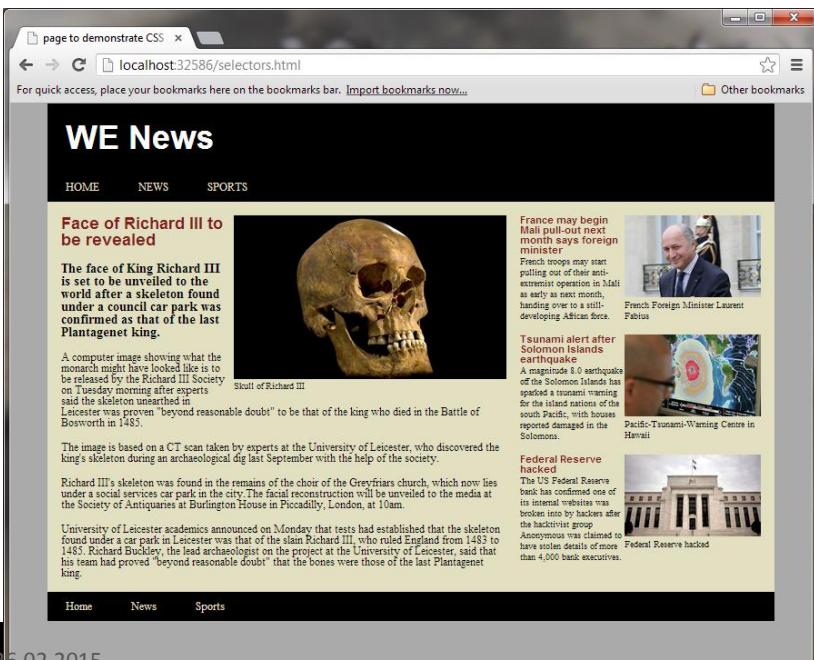
#container { width: 800px; margin: auto; background-color: #e3dfc1; }
#header { padding: 20px; background-color: #000; color: #fff; }
.nav { background-color: #000; }

...
.nav a:hover, a:focus { color: #fff; background-color: #861d1d; }
#footer .nav a { text-transform: none; }

#primary { width: 520px; float: left; }
#secondary { width: 280px; float: right; }
#footer { clear: both; background-color: #000; color: #fff; }

.news { ... }
#secondary .news { ... }

```



```

<body>
  <div id="container">
    <div id="header"> .... </div>
    <ul class="nav">.... </ul>
    <div id="primary">
      <div class="news"> ..... </div>
    </div>
    <div id="secondary">
      <div class="news"> ..... </div>
      ...
    </div>
    <div id="footer"> ..... </div>
  </body>

```

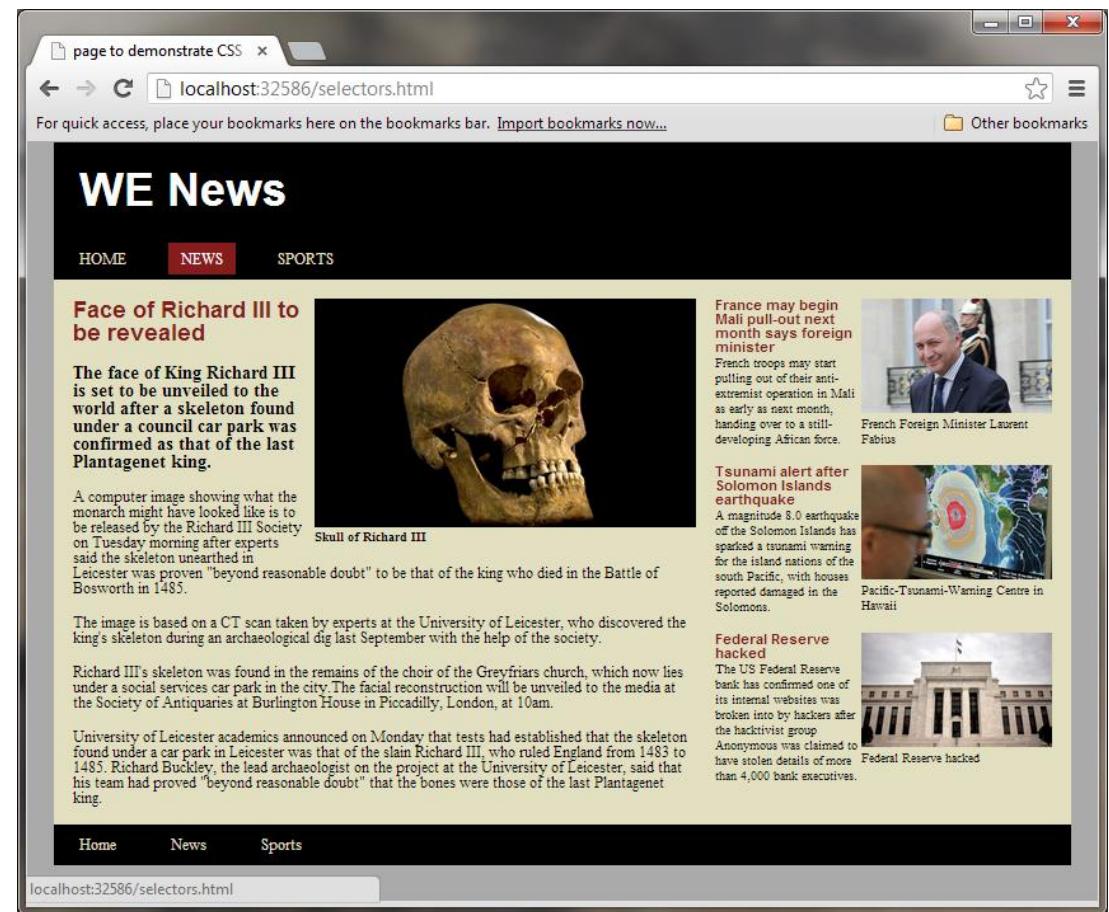
identifiers and classes

IDs identify unique elements

classes refer to similar elements

```
<div id="header">  
  
-- <ul class="nav"> ----->
```

```
<div class="news"> ----->
```



microformats

set of standardised
naming conventions and
markup patterns

defined by developers to
make data accessible to
programs

tip: check if any relevant
microformats are available
for some of your site's
content

```
<div class="vcard">
  <span class="fn">
    <span class="given-name">Joe</span>
    <span class="family-name">Bloggs</span>
  </span>
  <span class="tel">0101 0202 2000</span>
</div>
```

“divitus”

using more divs than necessary

clutters and complicates code

reminiscent of pre-CSS when
tables were used in HTML to
structure documents

only use a div element if there
is no existing element that can
do the job

```
<div class="nav">
  <ul>
    <li><a href="home.html">Home</a></li>
    <li><a href="news.html">News</a></li>
    <li><a href="sports.html">Sports</a></li>
  </ul>
</div>
```



```
<ul class="nav">
  <li><a href="home.html">Home</a></li>
  <li><a href="news.html">News</a></li>
  <li><a href="sports.html">Sports</a></li>
</ul>
```

selectors

CSS selectors are used to target specific HTML elements

type selectors target a specific type of element

```
body { background-color: #aaa;  
      font-family: 'Times New Roman';  
      font-size: 12px; color: #000; }
```

```
h2 { font-family: Arial;  
     font-size: 150%; color: #861d1d; }
```

ID and class selectors target elements with corresponding ID or class

```
#header { padding: 20px;  
          background-color: #000;  
          color: #fff; }
```

```
.news { margin: 15px; }
```

descendant selectors

descendants of an element or group of elements can be a target by giving a list of selectors separated by spaces

```
#primary .news .figure img {width: 300px; }  
#secondary .news .figure img { width: 150px; }
```

child selector targets only immediate descendants

```
.nav>li {  
    display: inline-block;  
    padding: 10px 10px 10px 10px;  
}
```

note: child selector supported IE7 and above but bug in IE7 that causes problems if there are HTML comments between parent and child

sibling selector

targets element immediately following another element with same parent

```
.news h2 + p {  
    font-weight: bold;  
    font-size: 120%;  
}
```



The news article content includes:

- WE News** (header)
- Face of Richard III to be revealed** (sub-headline)
- A detailed paragraph about the discovery of King Richard III's skeleton.
- A large image of a skull.
- Text: "A computer image showing what the monarch might have looked like is to be released by the Richard III Society on Tuesday morning after experts said the skeleton unearthed in Leicester was proven 'beyond reasonable doubt' to be that of the king who died in the Battle of Bosworth in 1485."
- Text: "The image is based on a CT scan taken by experts at the University of Leicester, who discovered the king's skeleton during an archaeological dig last September with the help of the society."
- Text: "Richard III's skeleton was found in the remains of the choir of the Greyfriars church, which now lies under a social services car park in the city. The facial reconstruction will be unveiled to the media at the Society of Antiquaries at Burlington House in Piccadilly, London, at 10am."
- Text: "University of Leicester academics announced on Monday that tests had established that the skeleton found under a car park in Leicester was that of the slain Richard III, who ruled England from 1483 to 1485. Richard Buckley, the lead archaeologist on the project at the University of Leicester, said that his team had proved "beyond reasonable doubt" that the bones were those of the last Plantagenet king."
- HOME NEWS SPORTS** (navigation)
- Right sidebar with news snippets:
 - France may begin Mali pull-out next month says foreign minister
 - Tsunami alert after Solomon Islands earthquake
 - Federal Reserve hacked

pseudo-classes

selectors based on information not in document tree such as state of a link

structural pseudo-classes target elements based on document structure

```
.nav a:link, a:visited, a:active {  
    color: #e3dfc1; }  
.nav a:hover, a:focus {  
    color: #fff; background-color: #861d1d; }
```

```
.news p { margin-top: 15px; margin-bottom: 15px; }  
.news p:last-of-type { margin-bottom: 0px; }
```

```
#secondary .news:nth-child(2n) {  
    background-color: #d6cc84;  
}
```

CSS3 extended the set of pseudo-classes available

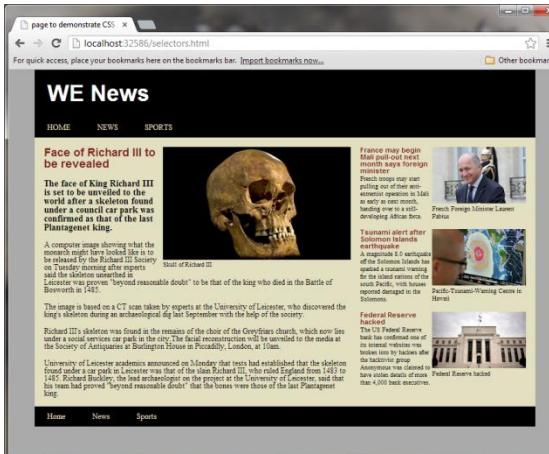
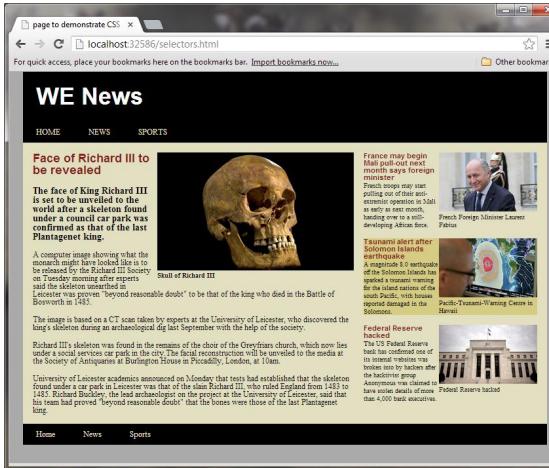


browser support for advanced selectors

older browsers may not support some of the advanced selectors

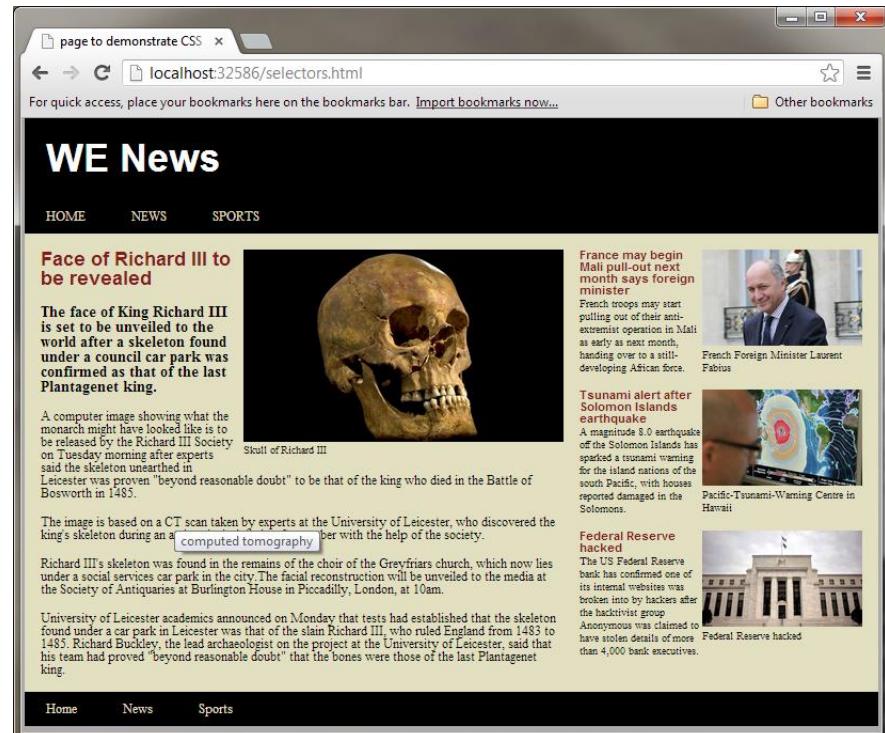
if selector not supported then rule will simply be ignored

think of using these therefore as refinements or embellishments in design that will not cause problems if absent in older browsers



attribute selectors

target an element based on existence of an attribute or attribute value



```
<acronym title="computed tomography">CT</acronym>
```

```
acronym[title] { border-bottom: 1px dotted #999; }  
acronym[title]:hover, acronym[title]:focus { cursor: help; }
```

cascade

- two or more rules may target the same element
- handled by cascade and specificity
- cascade assigns importance to rules in following order
 - user styles flagged as !important
 - author styles flagged as !important
 - author styles
 - user styles
 - browser/user agent styles

specificity

specificity of a rule calculated by adding values of each of its selectors

specificity of a selector broken down into 4 constituent levels: a, b, c and d

if it is an inline style, a equals 1

b equals the total number of ID selectors

c equals the number of class, pseudo-class and attribute selectors

d equals the number of type selectors and pseudo-element selectors

examples

| selector | specificity | *specificity base 10 |
|----------------------------|-------------|----------------------|
| Style = "" | 1,0,0,0 | 1000 |
| #wrapper #content { } | 0,2,0,0 | 200 |
| #content .datePosted { } | 0,1,1,0 | 110 |
| div #content { } | 0,1,0,1 | 101 |
| #content { } | 0,1,0,0 | 100 |
| p .comment .dateposted { } | 0,0,2,1 | 21 |
| p .comment { } | 0,0,1,1 | 11 |
| div p { } | 0,0,0,2 | 2 |
| p { } | 0,0,0,1 | 1 |

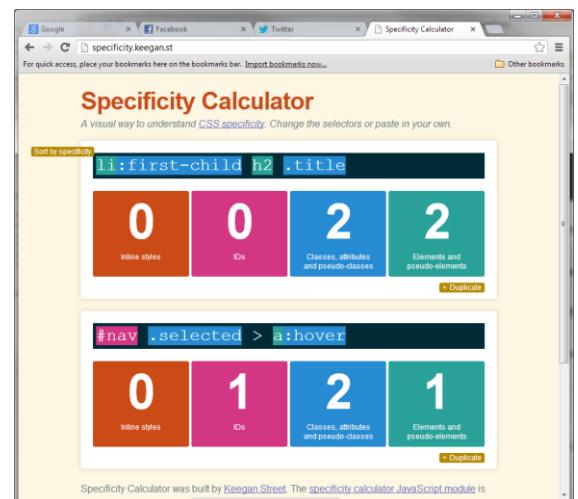
*: specificity not actually calculated in base 10

basic guidelines

- a rule written in a style attribute will always be more specific
- a rule with an ID will be more specific than one without
- a rule with a class selector will be more specific than with just type selectors
- if two rules have equal specificity, the last one prevails

tip 1: if CSS rules are not being applied, try adding IDs of parent elements to make rules more specific

tip 2: if a general style needs to be overridden several times, remove declaration that needs to be overridden from general rule and apply to specific rules



Bing Google Poll Results: How do you order your CSS properties? css-tricks.com/poll-results-how-do-you-order-your-css-properties/

Poll Results: How do you order your CSS properties?

PUBLISHED AUGUST 5, 2012 BY CHRIS COYIER

Over 10,000 people have spoken: the most popular way to order CSS properties is **grouped by type**.

This is how the votes broke down:

| Ordering Method | Percentage |
|-----------------|------------|
| Randomly | 39% |
| Grouped by type | 45% |
| By line length | 2% |
| Alphabetical | 14% |

Grouped by type (45%) was fairly closely followed up by **Randomly** (39%). Much less popular was **Alphabetical** (14%) and only a few folks using **Line length** (2%).

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THE LODGE

The Lodge is a **members only** area with access to a screencast video series covering the complete redesign of this very website.

User name / Email
Password
 Remember Me
Log In
Lost Password?

CSS properties grouped by type

```
.selector {  
  
    /* positioning */  
    position, top, right, z-index, ...  
  
    /* display and box model */  
    display, overflow, box-sizing, width, height,  
    padding, border, margin, ...  
  
    /* color */  
    background, color, ...  
  
    /* text */  
    font-family, font-size, line-height, text-align, ...  
  
    /* other */  
    cursor, ...  
}
```