CROSS COUNTRY

FROST-PROOF FUNDAMENTALS

FROST-PROOF FUNDAMENTALS

Slope Style

Selectors

Cascade Order

Floating Left & Right

CSS CROSS COUNTRY

SLOPE STYLE

Adding CSS:

- Inline style attribute
- In the `<head>`
- External `<link>`

SLOPE STYLE

Adding CSS:

- Inline style attribute

```
<h1 style="color: #98c7d4;">CSS Cross Country</h1>
```

SLOPE STYLE

Adding CSS:

- In the <head>

```
<head>
  <style>
    h1 { color: #98c7d4; }
  </style>
</head>
```

CSS
CROSS COUNTRY

SLOPE STYLE

Adding CSS:

- External `<link>`

```
<head>
  <title>CSS Cross Country</title>
  <link rel="stylesheet" href="styles.css" />
</head>
```

CSS CROSS COUNTRY

FROST-PROOF FUNDAMENTALS

Slope Style

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CSS CROSS COUNTRY

SELECTORS

Primary DOM selectors:

- Element selector
- Class selector
- ID selector

ADVANCED SELECTORS

Learn more about advanced selectors like child & sibling:

Link #1

1

CSS CROSS COUNTRY

SELECTORS

Primary DOM selectors:

- Element selector

```
<h1 class="intro" id="header">Nice and Toasty</h1>
```

```
h1 {
  color: #aba4ac;
  margin-bottom: 10px;
}
```

SELECTORS

Primary DOM selectors:

- Class selector

```
<h1 class="intro" id="header">Nice and Toasty</h1>
```

```
.intro {
  color: #aba4ac;
  margin-bottom: 10px;
}
```


CROSS COUNTRY

SELECTORS

Primary DOM selectors:

- ID selector

```
<h1 class="intro" id="header">Nice and Toasty</h1>
```

```
#header {
  color: #aba4ac;
  margin-bottom: 10px;
}
```


CSS CROSS COUNTRY

SELECTORS

Compound selectors:

```
<h1 class="intro" id="header">Nice and Toasty</h1>
```

```
h1#header {
  color: #aba4ac;
  margin-bottom: 10px;
}
```


CROSS COUNTRY

FROST-PROOF FUNDAMENTALS

Slope Style

Selectors

Cascade Order

Floating Left & Right

1

CROSS COUNTRY

CASCADE ORDER

Style priority is determined by position in site:

- External `<link>`
- In the `<head>`
- Inline style attribute
- Using `!important`

Increasing Priority

CSS CROSS COUNTRY

CASCADE ORDER

Priority is also dependent on position in document:

```
.intro {
  color: #444245;
}
.intro {
  color: #dddadd;
}
```

the second color definition for .downhill overrides the first

CSS CROSS COUNTRY

CASCADE ORDER

Non-conflicting properties will be combined:

```
.intro {
  color: #dddadd;
}
.intro {
  margin-bottom: 5px;
  width: 900px;
}
```

```
.intro {
  color: #dddadd;
  margin-bottom: 5px;
  width: 900px;
}
```

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CSS CROSS COUNTRY

FROST-PROOF FUNDAMENTALS

Slope Style

Selectors

Cascade Order

Floating Left & Right

CROSS COUNTRY

FLOATING LEFT & RIGHT

```
<article>
  <img src="ski.jpg" alt="Ski!" />
  <p>To successfully ski, simply do not fall.</p>
</article>
```

```
img {
  float: left;
}
```

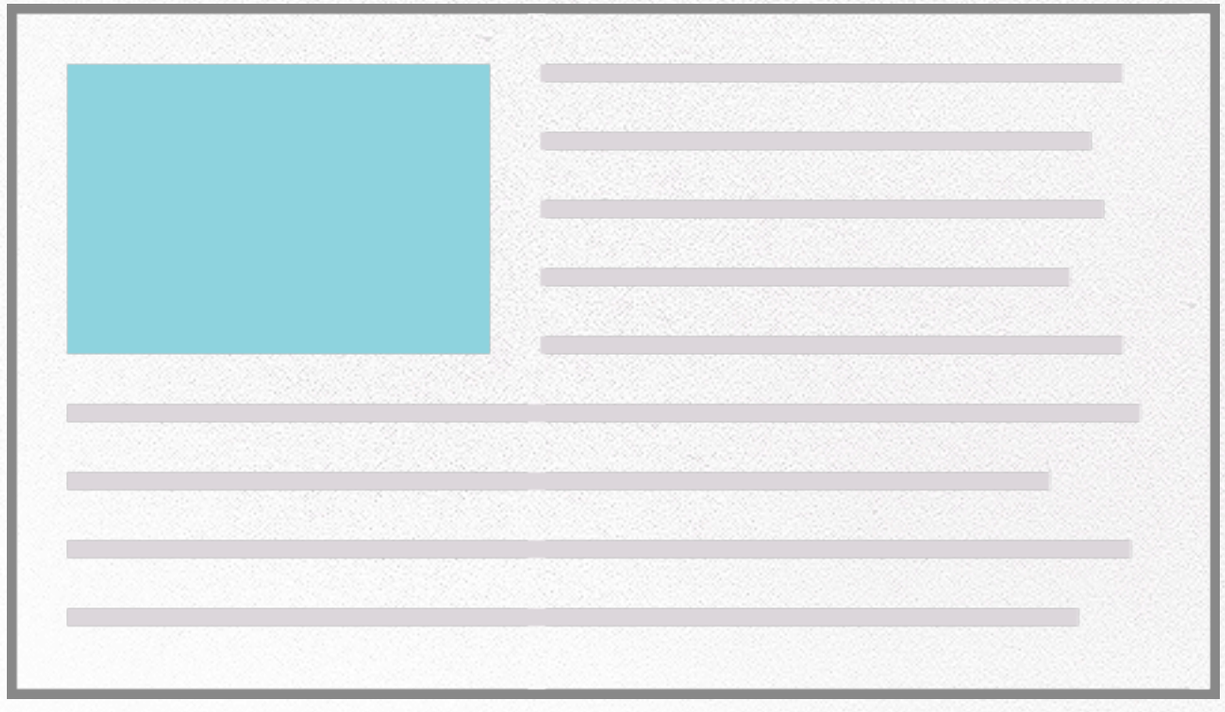
CSS CROSS COUNTRY

FLOATING LEFT & RIGHT

Removes elements from the document flow and moves them to a specified edge

- Other content within the parent element will wrap around floats

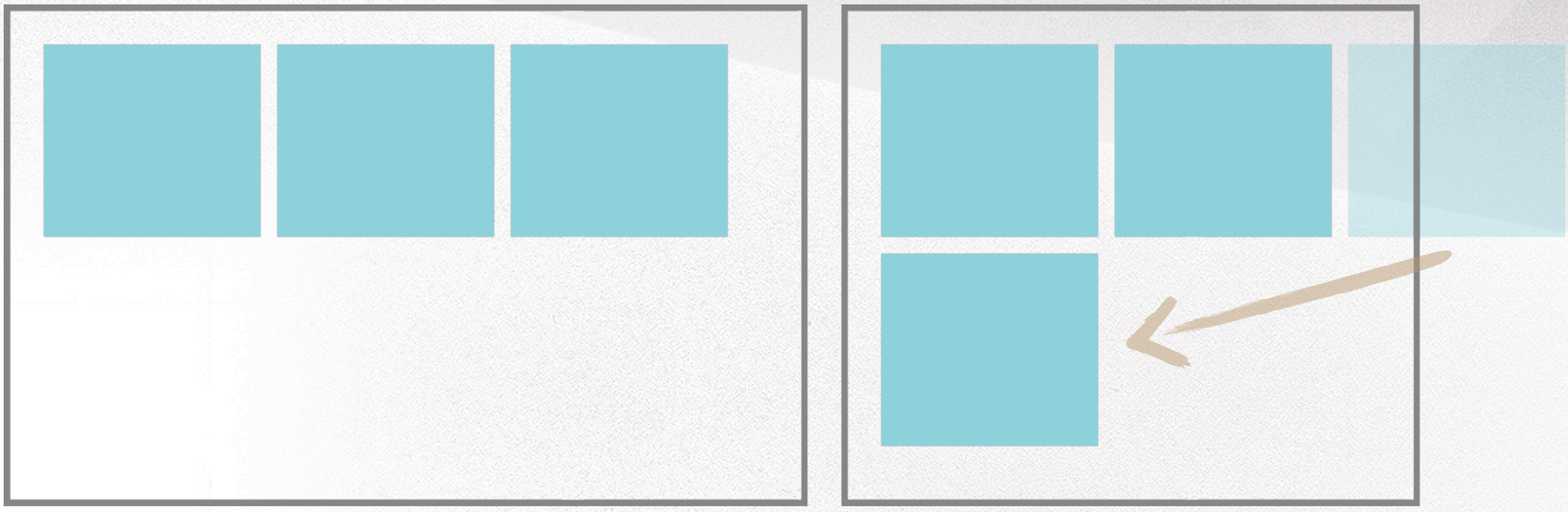
```
float: left / right / none
```



FLOATING LEFT & RIGHT

Stacking order:

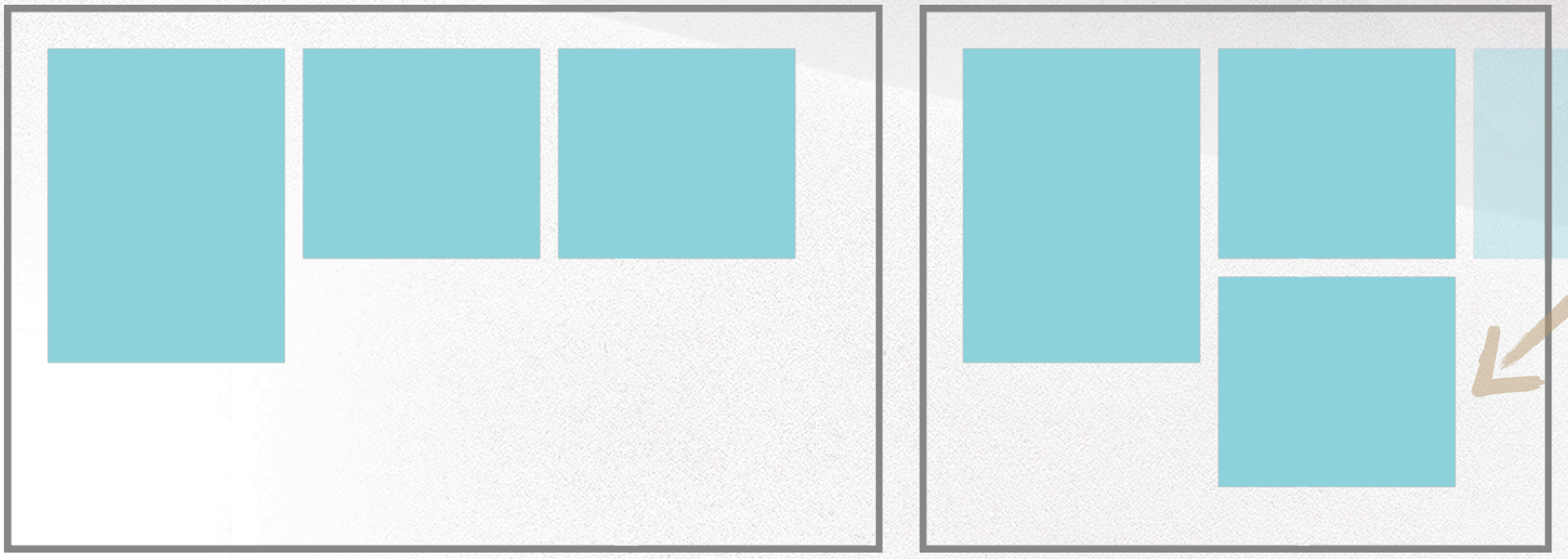
- Floated elements stack up to the parent edge, then move down to the next available edge



FLOATING LEFT & RIGHT

Stacking order:

- Take care with elements that have differing heights - the first available edge isn't always below

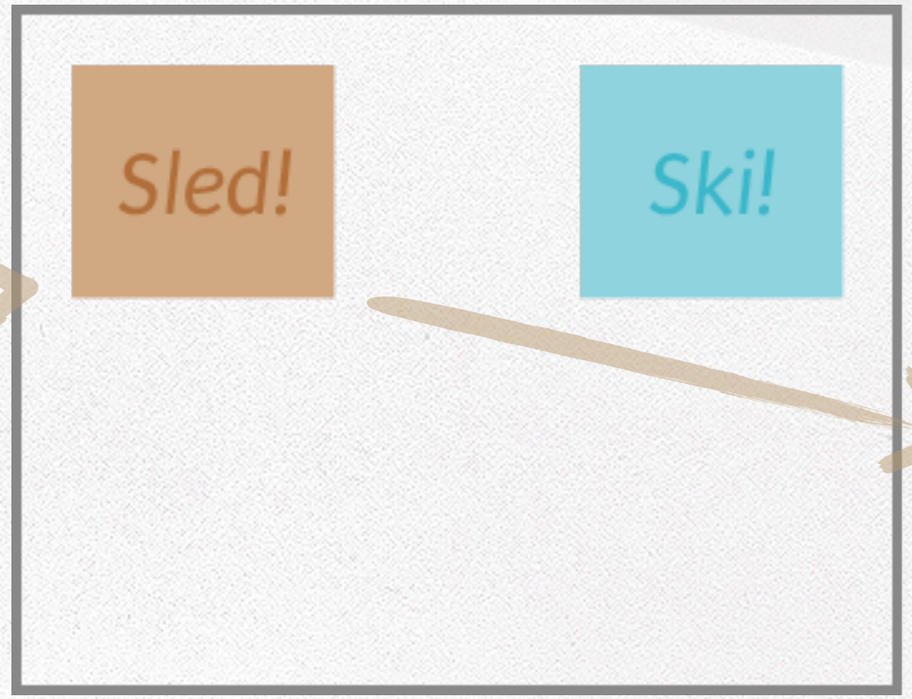


CSS CROSS COUNTRY

FLOATING LEFT & RIGHT

```
<article>
  <img class="ski" src="ski.jpg" alt="Ski!" />
  <img class="sled" src="sled.jpg" alt="Sled!" />
</article>
```

```
.ski {
  float: right;
}
.sled {
  float: left;
}
```

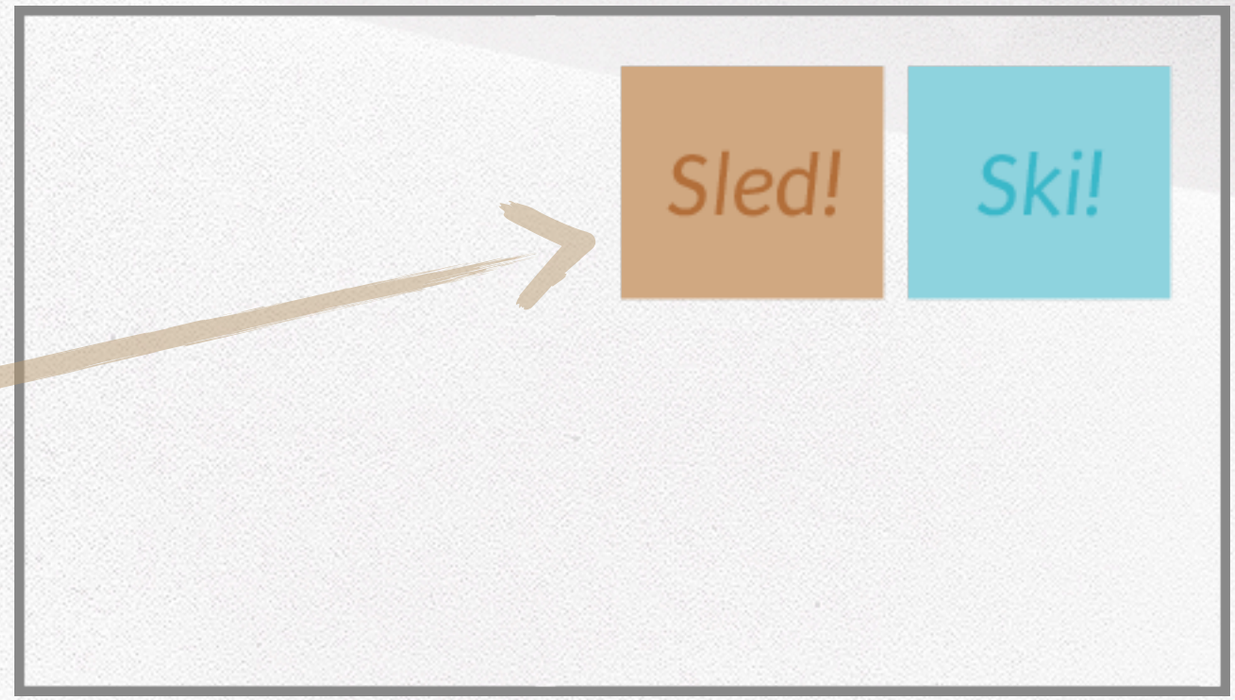


CSS CROSS COUNTRY

FLOATING LEFT & RIGHT

```
<article>
  <img class="ski" src="ski.jpg" alt="Ski!" />
  <img class="sled" src="sled.jpg" alt="Sled!" />
</article>
```

```
.ski {
  float: right;
}
.sled {
  float: right;
}
```



CSS CROSS COUNTRY

- *Download the slides*
- *Use the hints*

CLEAR CARVING

CLEAR CARVING

Clearing Floats

Inheritance & Specificity

2

CROSS COUNTRY

CLEARING FLOATS

Clearing is necessary if:

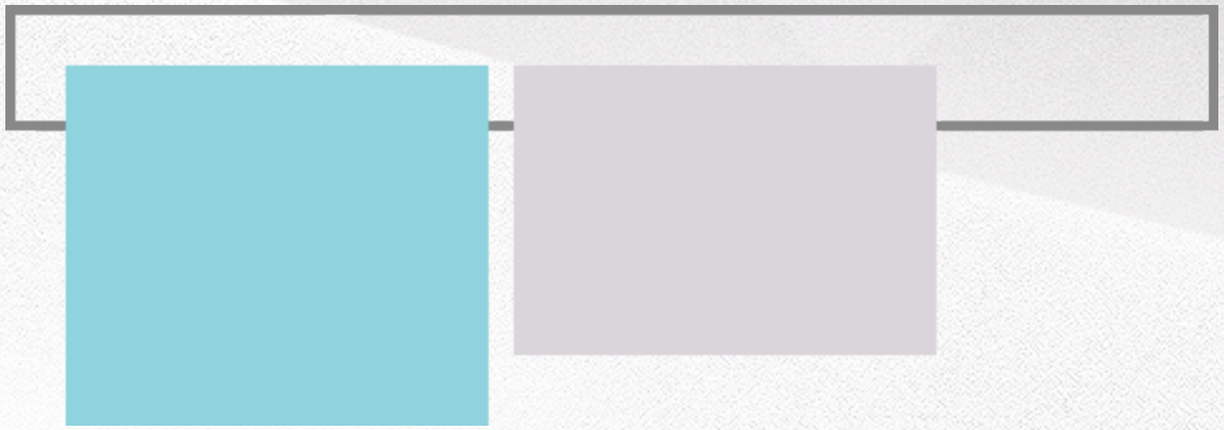
- Floated items can be taller than non-floated content

CROSS COUNTRY

CLEARING FLOATS

Clearing is necessary if:

- All children are floating



CLEARING FLOATS

Common float-clearing methods:

- Clear with a subsequent element
- Manual clearing
- The clearfix

```
clear: left / right / both
```

2

CSS CROSS COUNTRY

CLEARING FLOATS

Common float-clearing methods:

- Clear with a subsequent element

```
<div>
  <img src="ski.jpg" alt="Skiing!" />
  <p>To successfully ski, simply do not fall.</p>
</div>
<div class="intro">
  <p>Whee!</p>
</div>
```

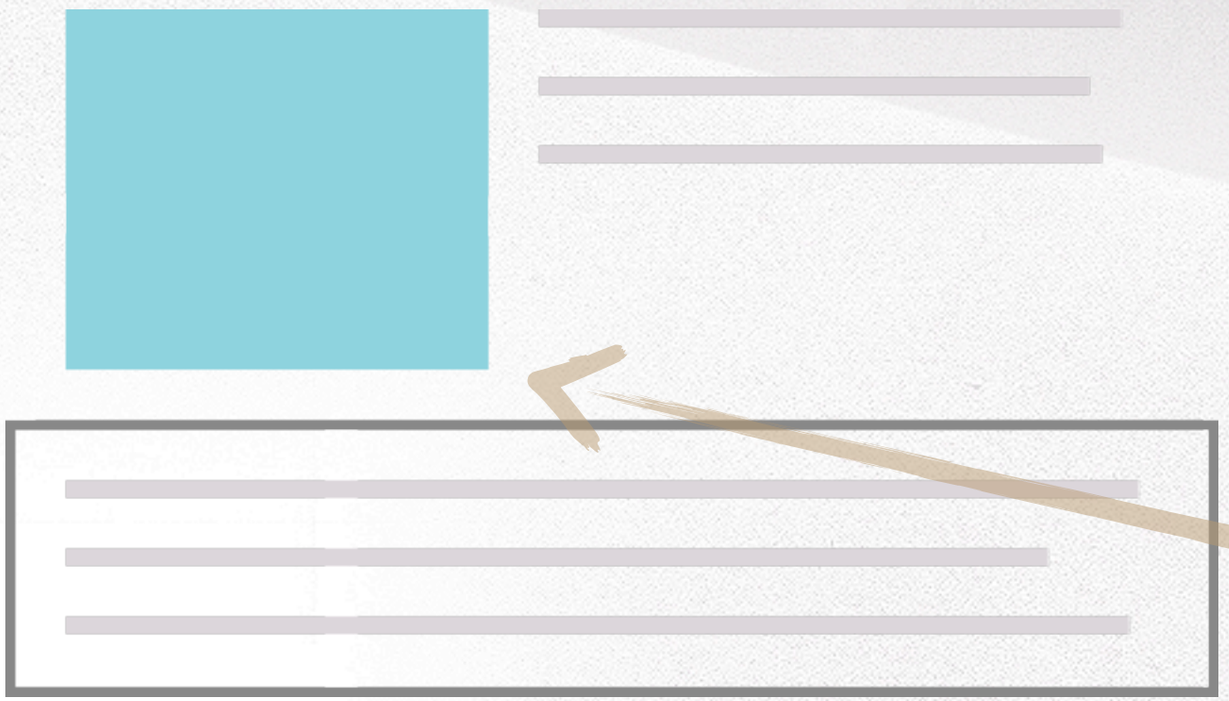
```
img {
  float: left;
}
.intro {
  clear: both;
}
```

CSS CROSS COUNTRY

CLEARING FLOATS

Common float-clearing methods:

- Clear with a subsequent element



```
img {
  float: left;
}
.intro {
  clear: both;
}
```


CSS CROSS COUNTRY

CLEARING FLOATS

Common float-clearing methods:

- Clear with a subsequent element
  - **Requires sequence to stay intact - breaks if things move**
  - **Background / border do not extend**

CROSS COUNTRY

CLEARING FLOATS

Common float-clearing methods:

- Manual clearing

```
<div>
  <img src="ski.jpg" alt="Skiing!" />
  <p>To successfully ski, simply do not fall.</p>
  <div class="clear"></div>
</div>
```

```
.clear {
  clear: both;
}
```


CROSS COUNTRY

CLEARING FLOATS

Common float-clearing methods:

- Manual clearing

```
.clear {
  clear: both;
}
```

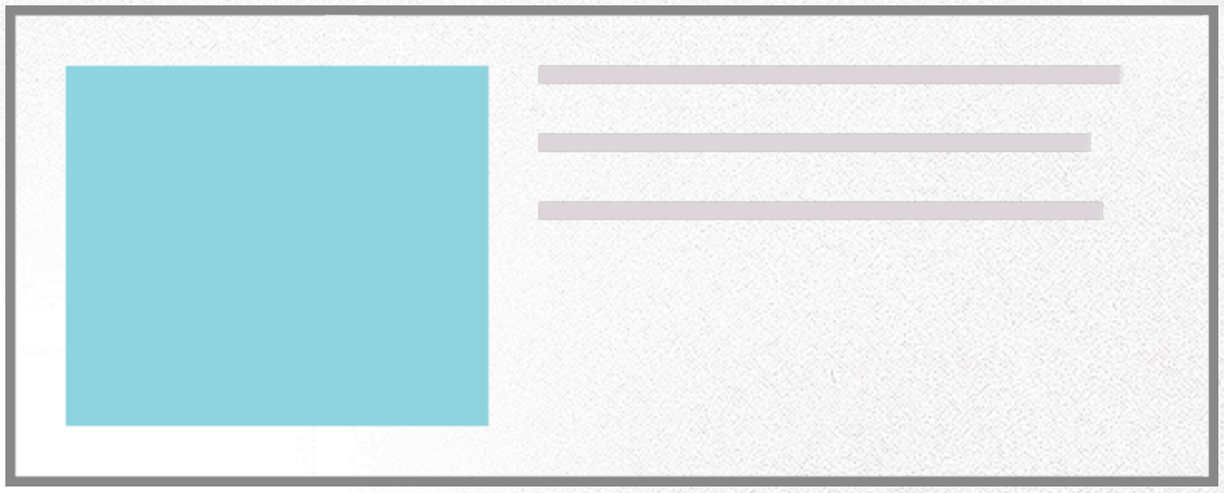
2

CROSS COUNTRY

CLEARING FLOATS

Common float-clearing methods:

- Manual clearing
  - Requires an empty element
  - Might not be necessary later



CROSS COUNTRY

CLEARING FLOATS

Common float-clearing methods:

The clearfix

```
.group:before,
.group:after {
  content: "";
  display: table;
}
.group:after {
  clear: both;
}
.group {
  zoom: 1; /* IE6&7 */
}
```

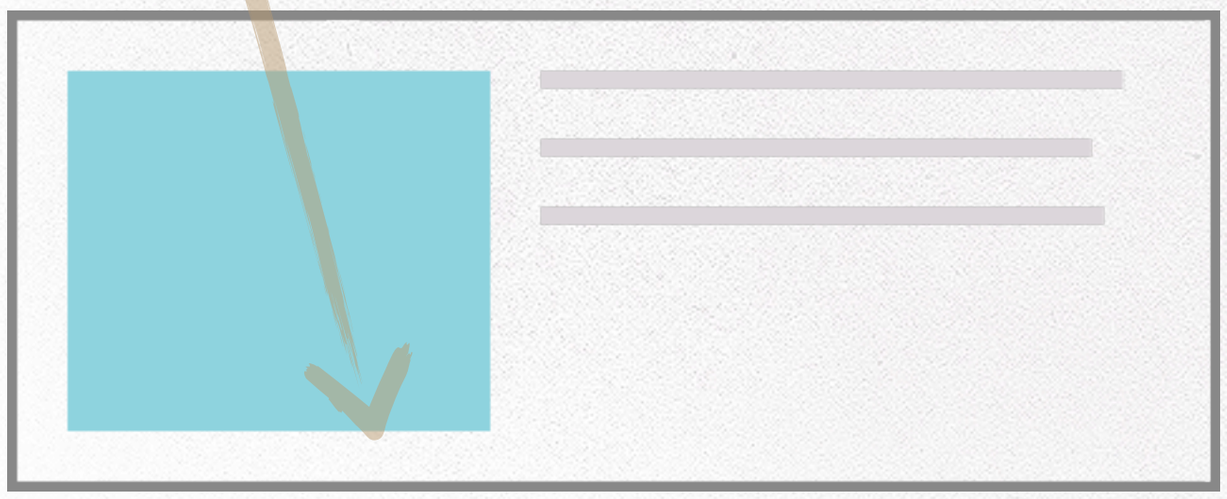
- Originally developed by Tony Aslett
- Refined version by Nicholas Gallagher
- When used on the parent, the children will be self-cleared

CLEARING FLOATS

Common float-clearing methods:

- The clearfix

```
<div class="group">
  <img src="ski.jpg" alt="Skiing!" />
  <p>To successfully ski, simply do not fall.</p>
</div>
```



CSS CROSS COUNTRY

CLEAR CARVING

Clearing Floats

Inheritance & Specificity

2

CROSS COUNTRY

INHERITANCE & SPECIFICITY

Nested elements automatically inherit parent styles:

```
<article class="featured">
  <p>Dang, it's cold up here!</p>
</article>
```

```
.featured {
  color: #aba4ac;
}
```

the paragraph content above
will inherit this color

INHERITANCE & SPECIFICITY

Selectors can be nested to override parent properties:

```
<article class="featured">
  <p>Dang, it's cold up here!</p>
</article>
```

```
.featured {
  color: #0000ff;
}
.featured p {
  color: #fff;
}
```

nesting the element selector overrides the color on .featured

CSS CROSS COUNTRY

INHERITANCE & SPECIFICITY

Dealing with specificity:

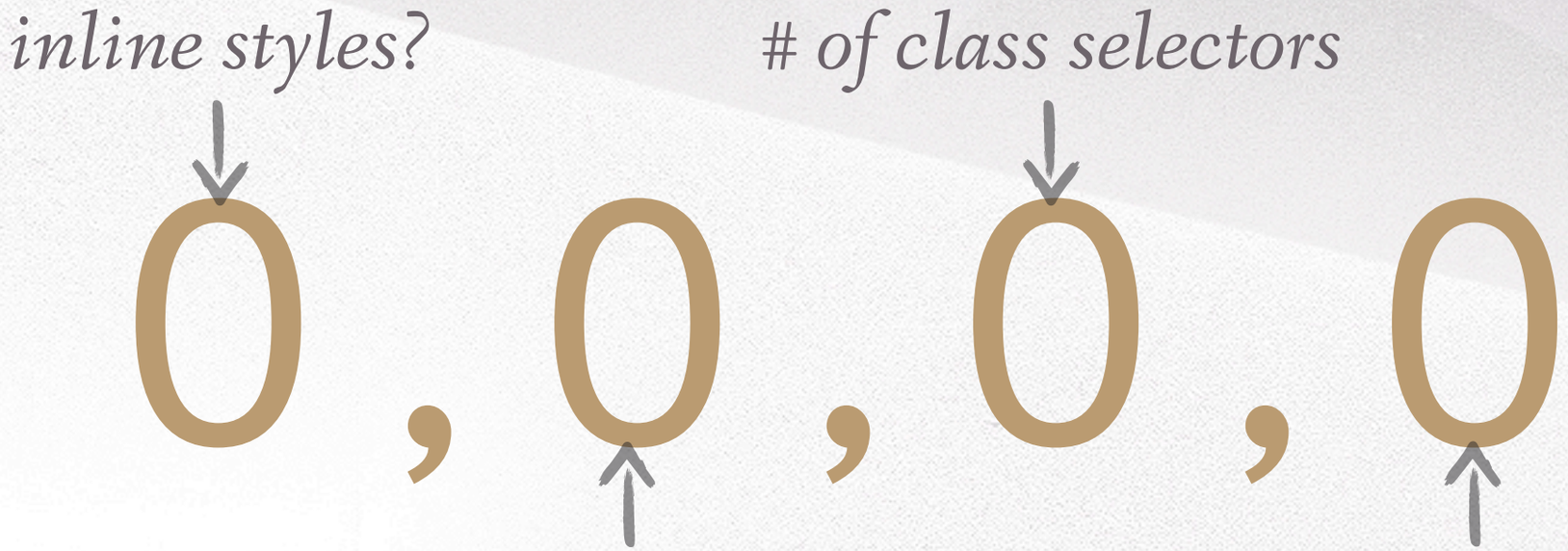
```
<div id="content" class="featured">
  <p>Break out the cocoa.</p>
</div>
```

```
#content {
  color: #555;
}
.featured {
  color: #ccc;
}
```

CROSS COUNTRY

INHERITANCE & SPECIFICITY

The priority of a selector (specificity):



CROSS COUNTRY

INHERITANCE & SPECIFICITY

```
p { color: #fff; }
```

0,0,0,1

```
.intro { color: #98c7d4; }
```

0,0,1,0

```
#header { color: #444245; }
```

0,1,0,0

```
<h1 style="color: #000;">Mogul</h1>
```

1,0,0,0

```
p { color: #fff !important; }
```

CSS
CROSS COUNTRY

INHERITANCE & SPECIFICITY

```
.intro p.article { color: #fff; }
```
0,0,2,1

```
.intro ul li.active { color: #98c7d4; }
```
0,0,2,2

```
#header { color: #444245; }
```
0,1,0,0

STICKING TO CLASSES

Learn more about why using IDs sparingly will decrease complexity:

Link #1

2

CSS CROSS COUNTRY

INHERITANCE & SPECIFICITY

Dealing with specificity:

```
<section id="content">
  <p class="featured">Free coffee with ski rental.</p>
  <p>Choose from 48 different ski colors.</p>
</section>
```

```
#content p {          0,1,0,1
  color: #000;
}
.featured {           0,0,1,0
  color: #777;
}
```

CSS CROSS COUNTRY

INHERITANCE & SPECIFICITY

Dealing with specificity:

```
<section id="content">
  <p class="featured">Free coffee with ski rental.</p>
  <p>Choose from 48 different ski colors.</p>
</section>
```

```
#content p {
  color: #000;
}
.featured {
  color: #777 !important;
}
```

CSS CROSS COUNTRY

INHERITANCE & SPECIFICITY

Dealing with specificity:

```
<section id="content">
  <p class="featured">Free coffee with ski rental.</p>
  <p>Choose from 48 different ski colors.</p>
</section>
```

```
#content p {                0,1,0,1
  color: #000;
}
#content .featured {        0,1,1,0
  color: #777;
}
```

2

CSS CROSS COUNTRY

CROSS COUNTRY

BOX BINDINGS

3

BOX BINDINGS

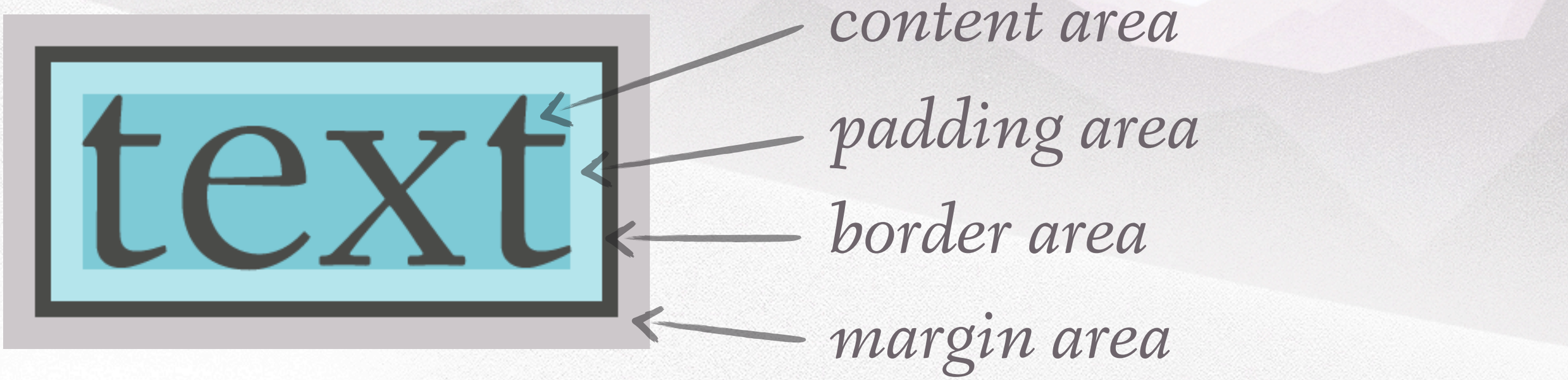
The Box Model

Positioning

Z-Index

THE BOX MODEL

An imaginary diagram that outlines each DOM element:



CROSS COUNTRY

THE BOX MODEL

Width:

- Total calculated box width =
  `content width + padding width + border width`

```
.downhill {
  border: 5px solid #fff;
  padding-left: 10px;
  padding-right: 5px;
  width: 100px;
}
```

```
100px   content width
 15px   padding width
+ 10px   border width
-------
125px   box width
```

CSS CROSS COUNTRY

THE BOX MODEL

Width:

- When adapting a design, you'll need to calculate the content width

```
.downhill {
  border: 1px solid #fff;
  padding-left: 14px;
  padding-right: 14px;
  width: ?
}
```

```
  340px  box width (design)
   28px  padding width
-   2px  border width
-------
  310px  content width
```

CROSS COUNTRY

THE BOX MODEL

The overflow property:

```
overflow: visible / auto / hidden / scroll
```


CSS CROSS COUNTRY

THE BOX MODEL

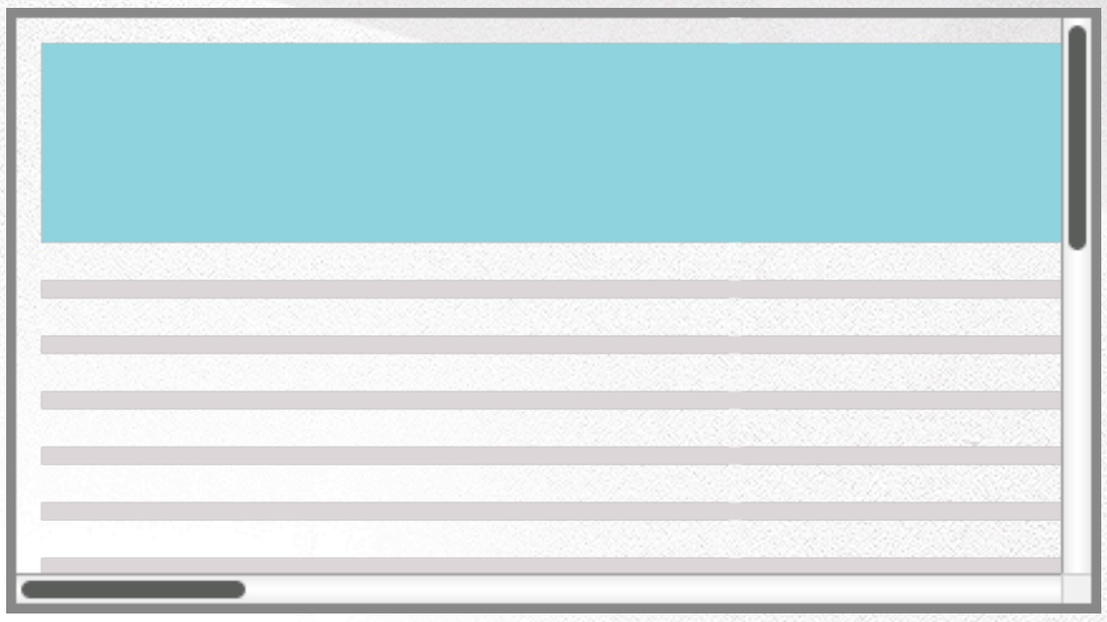
The overflow property:

- `visible` - the default value, which allows content to extend beyond container boundaries

THE BOX MODEL

The overflow property:

- `auto` - adds a scrollbar as needed when content overflows

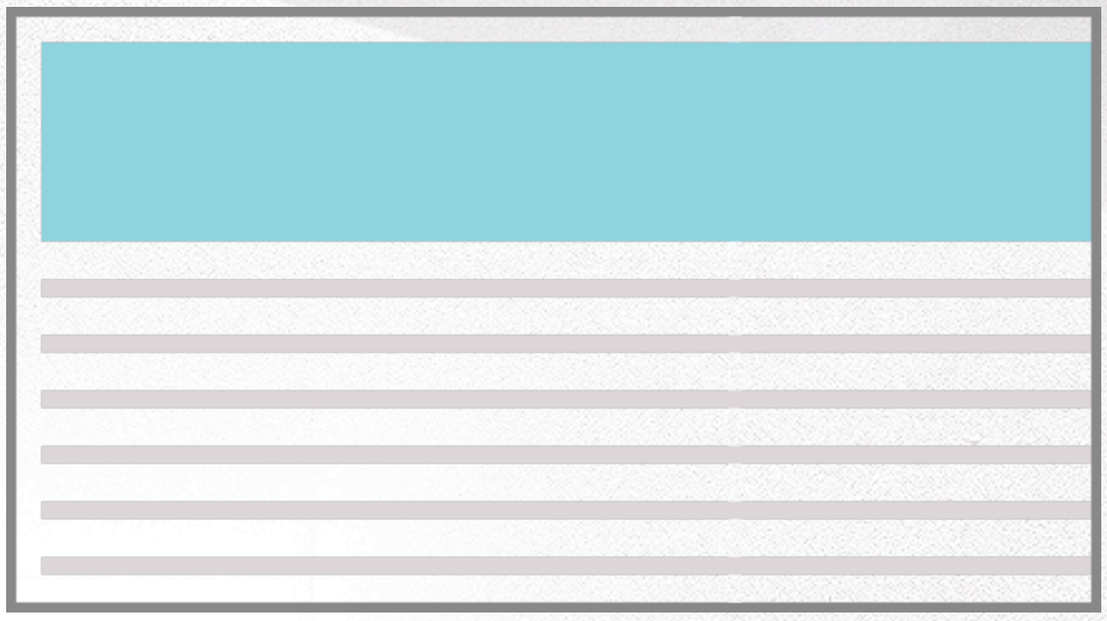


CSS CROSS COUNTRY

THE BOX MODEL

The overflow property:

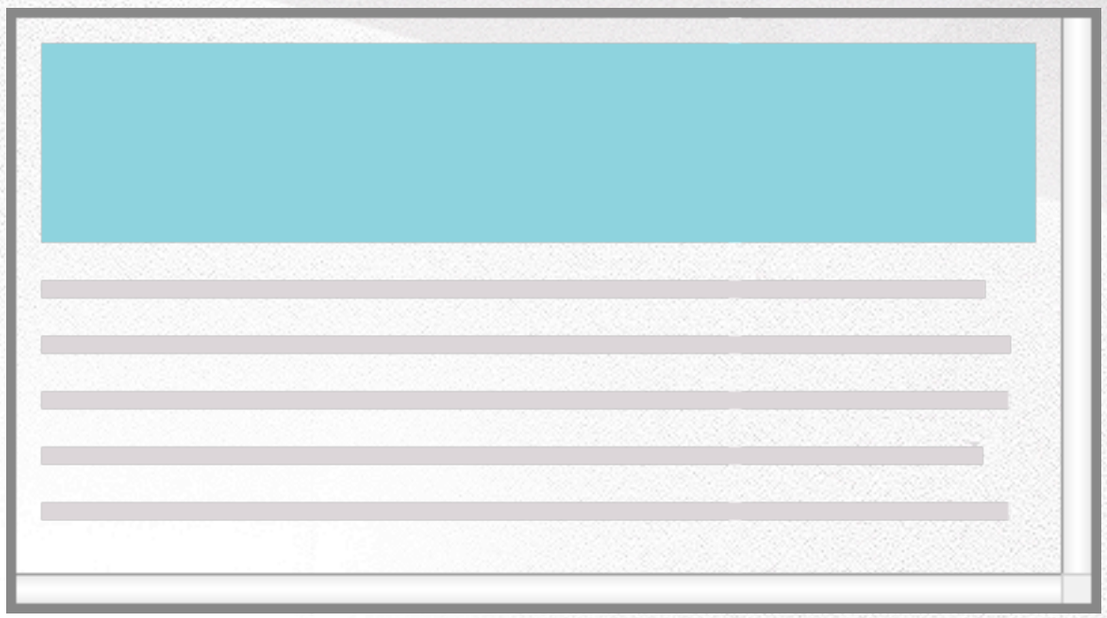
- `hidden` - hides content that extends beyond the container



THE BOX MODEL

The overflow property:

- `scroll` - adds a scrollbar at all times, even if unneeded



CROSS COUNTRY

BOX BINDINGS

The Box Model

Positioning

Z-Index

POSITIONING

Elements have a position value of static by default:

```
position: static / relative / absolute / fixed
```

- Using a value other than static causes an object to become a *positioned element*
- Positioned elements may use the `top`, `left`, `bottom`, and `right` properties for placement

POSITIONING

Relative positioning:

- Renders in the normal flow, then shifted via positioning properties

```
<article>
  <h2>Sven's SnowshoeX<sup>2</sup></h2>
</article>
```

```
sup {
  font-size: 75%;
  line-height: 0;
  vertical-align: baseline;
  position: relative;
  top: -0.5em;
}
```

Link #1

Sven's SnowshoeX^2

POSITIONING

Absolute positioning:

- Takes an element out of the normal flow for manual positioning

```
<article>
  <h2>New Snowshoes</h2>
  <h3>By: Sven</h3>
  <p>This season's hot styles, available now!</p>
</article>
```

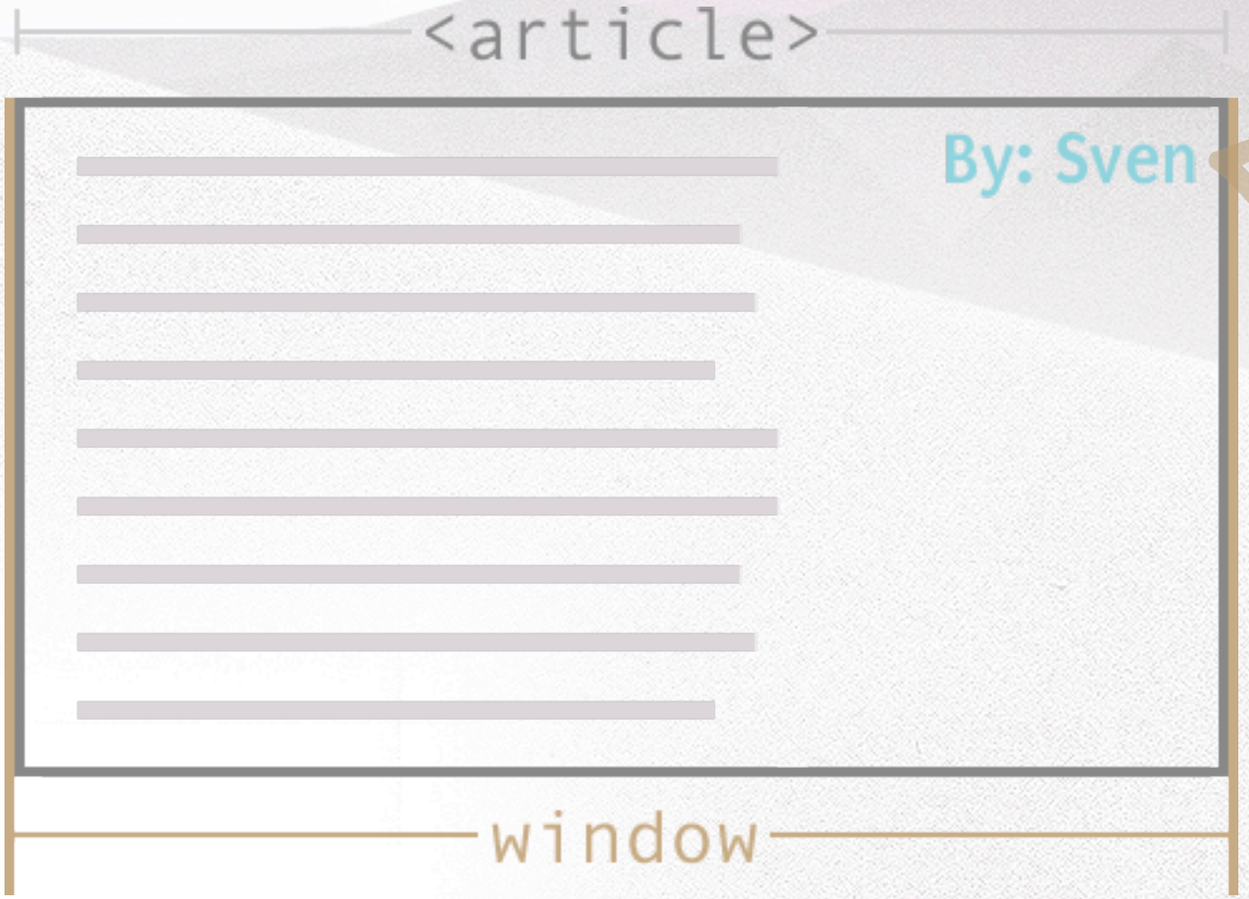
```
h3 {
  position: absolute;
  right: 10px;
  top: 10px;
}
```

3

CSS CROSS COUNTRY

POSITIONING

Absolute positioning:




```
h3 {
  position: absolute;
  right: 10px;
  top: 10px;
}
```


CSS CROSS COUNTRY

POSITIONING

Absolute positioning:


```
h3 {
  position: absolute;
  right: 10px;
  top: 10px;
}
```


CSS CROSS COUNTRY

POSITIONING

Absolute positioning:


```
article {
  position: relative;
}
h3 {
  position: absolute;
  right: 10px;
  top: 10px;
}
```


CSS CROSS COUNTRY

POSITIONING

Fixed positioning:

- Affixes an element to a specific place in the window, where it will stay regardless of scrolling

```
.ski {
  position: fixed;
  right: 10px;
  top: 10px;
}
```

CROSS COUNTRY

BOX BINDINGS

The Box Model

Positioning

Z-Index

Z-INDEX

Manually adjusting overlap:

- No `z-index` or equal `z-index` = overlap determined by placement in DOM

```
<article>
  <img class="ski" src="ski.jpg" alt="Ski!" />
  <img class="sled" src="sled.jpg" alt="Sled!" />
</article>
```

```
.ski, .sled {
  z-index: 1;
}
```

CROSS COUNTRY

Z-INDEX

Manually adjusting overlap:

- Higher values appear above lower values

```
<article>
  <img class="ski" src="ski.jpg" alt="Ski!" />
  <img class="sled" src="sled.jpg" alt="Sled!" />
</article>
```

```
.ski {
  z-index: 1;
}
```

CSS CROSS COUNTRY

Z-INDEX

Manually adjusting overlap:

- Elements must be positioned for z-index to take effect. Use `relative` if you're not interested in moving the object

STACKING ORDER

Learn more about how floats, positioning and z-index stacks:

Link #2

CROSS COUNTRY


CROSS COUNTRY

GROOMING YOUR CODE

GROOMING YOUR CODE

Staying DRY

Display Types

Centering

STAYING DRY

D - Don't

R - Repeat

Y - Yourself

STAYING DRY

Suppose you want to include a font property in a number of text-related elements:

```
<body>
  <div class="container">
    <h1>Sven's Snowshoe Superstore</h1>
    <p>Our snowshoes are so stylish!</p>
    <a class="sale" href="/sale">View our sales</a>
  </div>
</body>
```


CROSS COUNTRY

STAYING DRY

```
h1 {
  font-family: Arial, sans-serif;
}
p {
  font-family: Arial, sans-serif;
}
.sale {
  font-family: Arial, sans-serif;
}
```

```
body {
  font-family: Arial, sans-serif;
}
```

```
<body>
  <div class="conta
    <h1>Sven's Snows
    <p>Our snowshoes
    <a class="sale"
  </div>
</body>
```

CSS
CROSS COUNTRY

STAYING DRY

You can also target another parent element:

```
.container {
  font-family: Arial, sans-serif;
}
```

```
<body>
  <div class="container">
    <h1>Sven's Snowshoe Superstore</h1>
    <p>Our snowshoes are so stylish!</p>
    <a class="sale" href="/sale">View our sales</a>
```


CROSS COUNTRY

STAYING DRY

Selector combination:

```
p {
  font-size: 12px;
}

.ski_lift {
  font-size: 12px;
}

h6 {
  font-size: 12px;
}
```

```
p, .ski_lift, h6 {
  font-size: 12px;
}
```

CSS CROSS COUNTRY

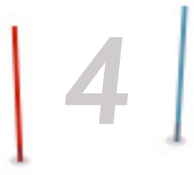
STAYING DRY

Selector abstraction:

```
.submit { border: 1px solid #000; cursor: pointer;
  text-transform: uppercase;
}

.next_button { border: 1px solid #000; cursor: pointer;
  text-transform: uppercase;
}
```


```
<input type="submit" class="submit" />
<a href="next_page.html" class="next_button" >Next</a>
```



CSS CROSS COUNTRY

STAYING DRY

DRY this up by abstracting the CSS declarations into one class:

```
.button { border: 1px solid #000; cursor: pointer;
  text-transform: uppercase;
}
```

```
<input type="submit" class="button" />
<a href="next_page.html" class="button">Next</a>
```

STAYING DRY

What if the buttons are only mostly the same?

```
.button {
  background: #fff;
  border: 1px solid #000;
  color: #333;
  cursor: pointer;
}
```

```
<input type="submit" class="button" />
<a href="next_page.html" class="button">Next</a>
```

STAYING DRY

```
.button {
  background: #fff;
  border: 1px solid #000;
  color: #333;
  cursor: pointer;
}
.submit {
  background: #555;
}
```

order matters here

```
<input type="submit” class="button submit" />
<a href="next_page.html" class="button">Next</a>
```


CSS CROSS COUNTRY

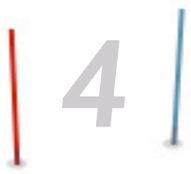
STAYING DRY

Style shorthand - margin:

```
.ski_poles { margin-top: 15px; margin-left: 20px;
margin-right: 10px; margin-bottom: 0; }
```

Can be re-written as:

```
.ski_poles {
  margin: 15px 10px 0 20px; /* top right bottom left */
}
```

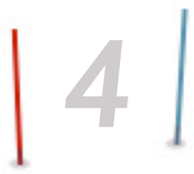


CSS CROSS COUNTRY

STAYING DRY

Top - Right - Bottom - Left:

```
.ski_poles {
  margin: 15px 10px 0 20px; /* top right bottom left */
}
```



CSS CROSS COUNTRY

STAYING DRY

Selected CSS property shorthands:

```
font: italic bold 16px/18px sans-serif;
/* style weight size/line-height family */

background: #000 url(image.jpg) no-repeat center top;
/* color image repeat x-pos y-pos */

list-style: disc inside none;
/* style position image */

margin or padding: 0 10px 0 10px / 0 10px 0 / 0 10px;
/* top right bottom left / top right&left bottom / top&bottom right&left */

border: 3px solid #ccc;
/* width style color */
```

GROOMING YOUR CODE

Staying DRY

Display Types

Centering

CROSS COUNTRY

DISPLAY TYPES

Display:

```
display: none / block / inline / inline-block
```

DISPLAY TYPES

```
<div class="container">
  <h1>Sven's Snowshoe Superstore</h1>
  <p>Our snowshoes are so stylish!</p>
  <a class="sale" href="/sale">View our sales</a>
</div>
```

```
.sale {
  float: left;
  width: 100%;
  padding: 0 10px;
  margin: 5px 0;
  text-align: center;
}
```

CROSS COUNTRY

DISPLAY TYPES

```
<div class="container group">
  <h1>Sven's Snowshoe Superstore</h1>
  <p>Our snowshoes are so stylish!</p>
  <a class="sale" href="/sale">View our sales</a>
</div>
```

```
.sale {
  float: left;
  width: 100%;
  padding: 0 10px;
  margin: 5px 0;
  text-align: center;
}
```

4

CSS CROSS COUNTRY

DISPLAY TYPES

Block elements:

- Stretch the full width of their container
- Behave as though there is a line break before and after the element
- Full box model can be manipulated

BLOCK ELEMENTS

Tags that are block-level by default:

`<div>`, `<p>`, `<ul>`, `<ol>`, `<li>` and `<h1>` through `<h6>`.

DISPLAY TYPES

Inline elements:

- Typically found within block-level elements
- Only take up the space of the content inside
- Do not generate a line break before and after the content

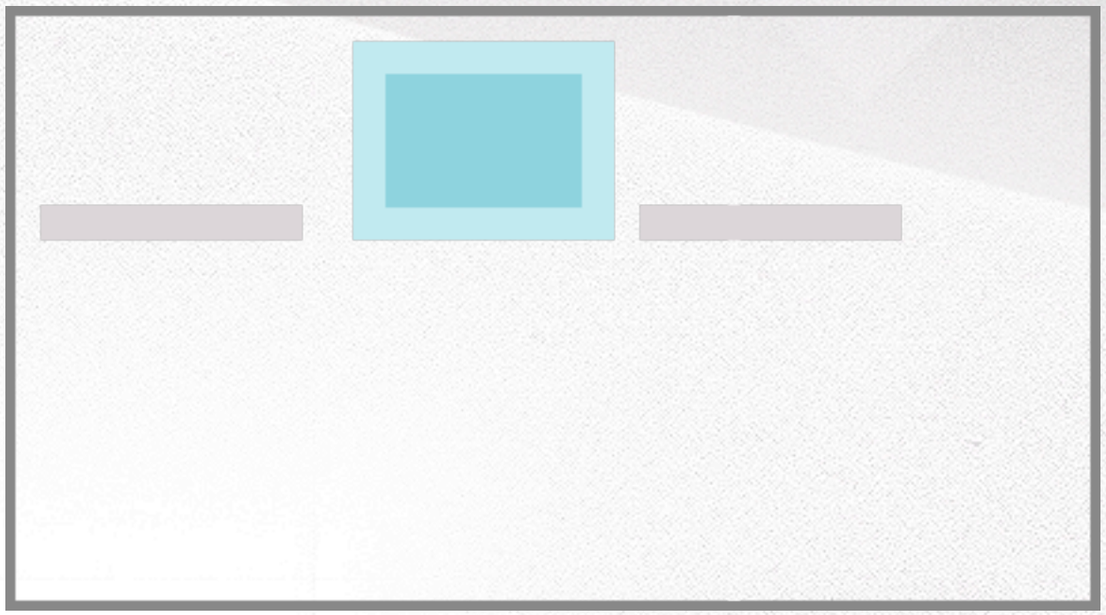
INLINE ELEMENTS

Tags that are inline by default include `<span>`, `<a>`, `<em>`, `<img>`, and `<strong>`.

DISPLAY TYPES

Inline-block

- Same flow as an inline element but behave as a block element



DISPLAY TYPES

```
<div class="container group">
  <h1>Sven's Snowshoe Superstore</h1>
  <p>Our snowshoes are so stylish!</p>
  <a class="sale" href="/sale">View our sales</a>
</div>
```

```
.sale {
  float: left;
  width: 100%;
  padding: 0 10px;
  margin: 5px 0;
  text-align: center;
}
```

4

CSS CROSS COUNTRY

DISPLAY TYPES

```
<div class="container">
  <h1>Sven's Snowshoe Superstore</h1>
  <p>Our snowshoes are so stylish!</p>
  <a class="sale" href="/sale">View our sales</a>
</div>
```

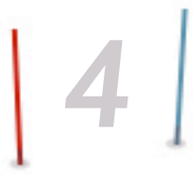
```
.sale {
  display: block;
  padding: 0 10px;
  margin: 5px 0;
  text-align: center;
}
```

GROOMING YOUR CODE

Staying DRY

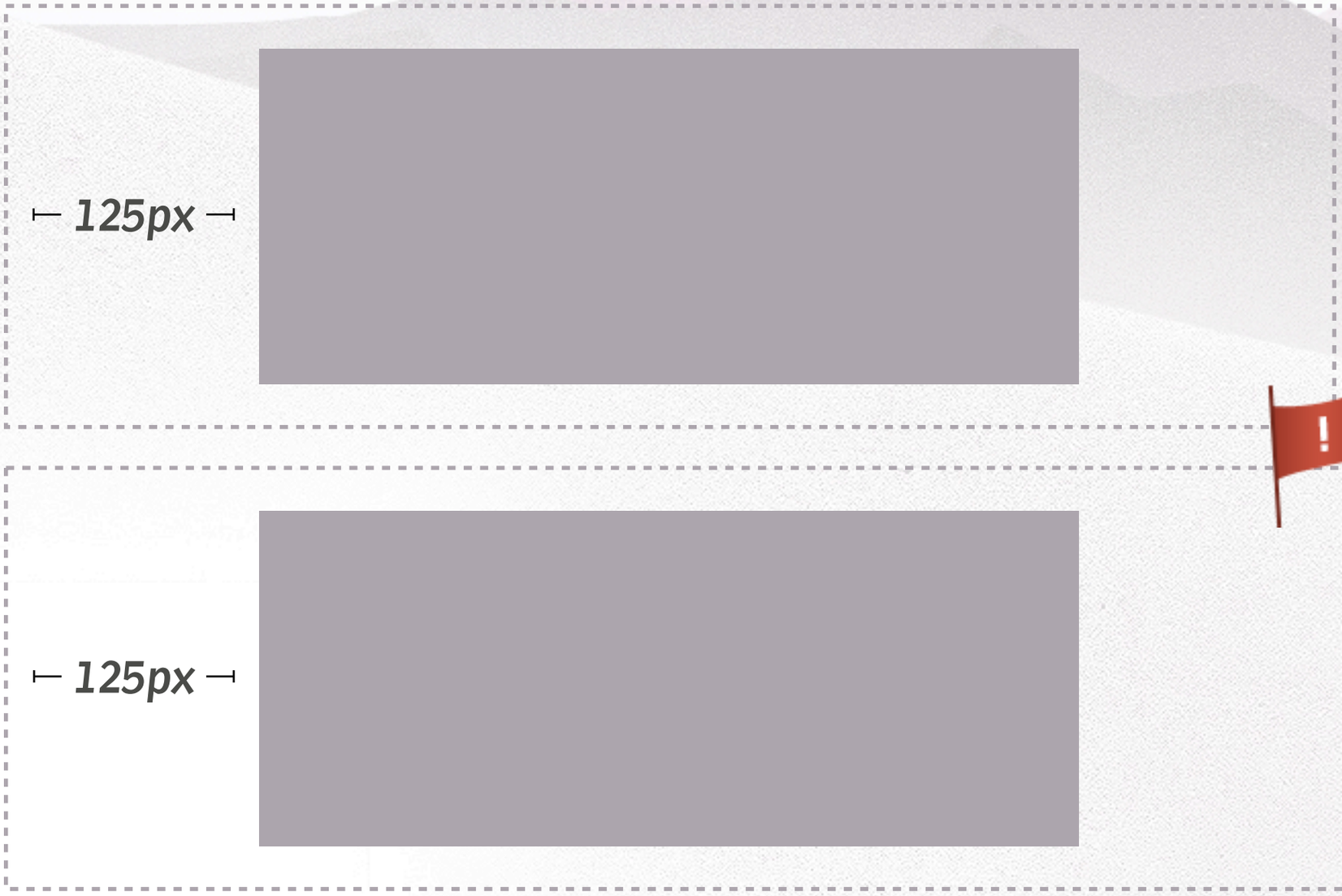
Display Types

Centering



CENTERING

Centering a block-level element:



CROSS COUNTRY

CENTERING

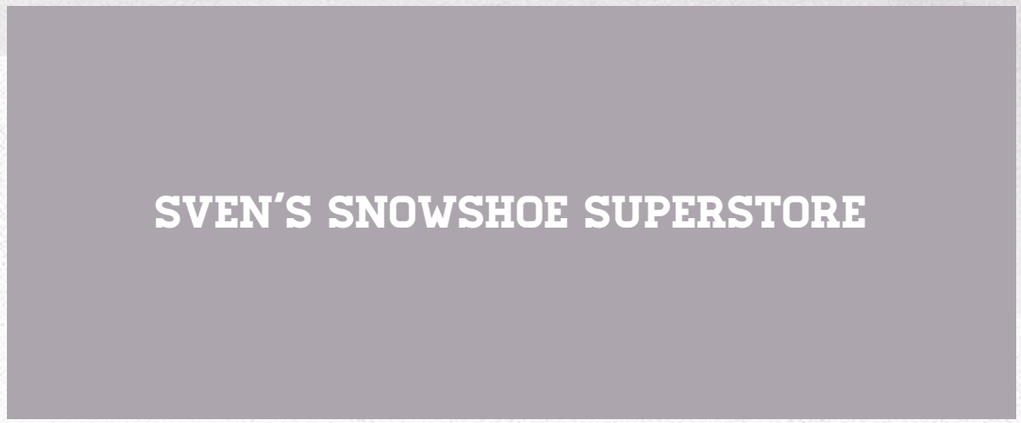
Centering a block-level element:

- Define a width, and the element width must be less than that of the parent container
- `margin: 0 auto;`

CROSS COUNTRY

CENTERING

Centering inline and inline-block elements:



- `text-align:center`

4

CSS CROSS COUNTRY

CROSS COUNTRY

CSS SAFETY

CSS SAFETY

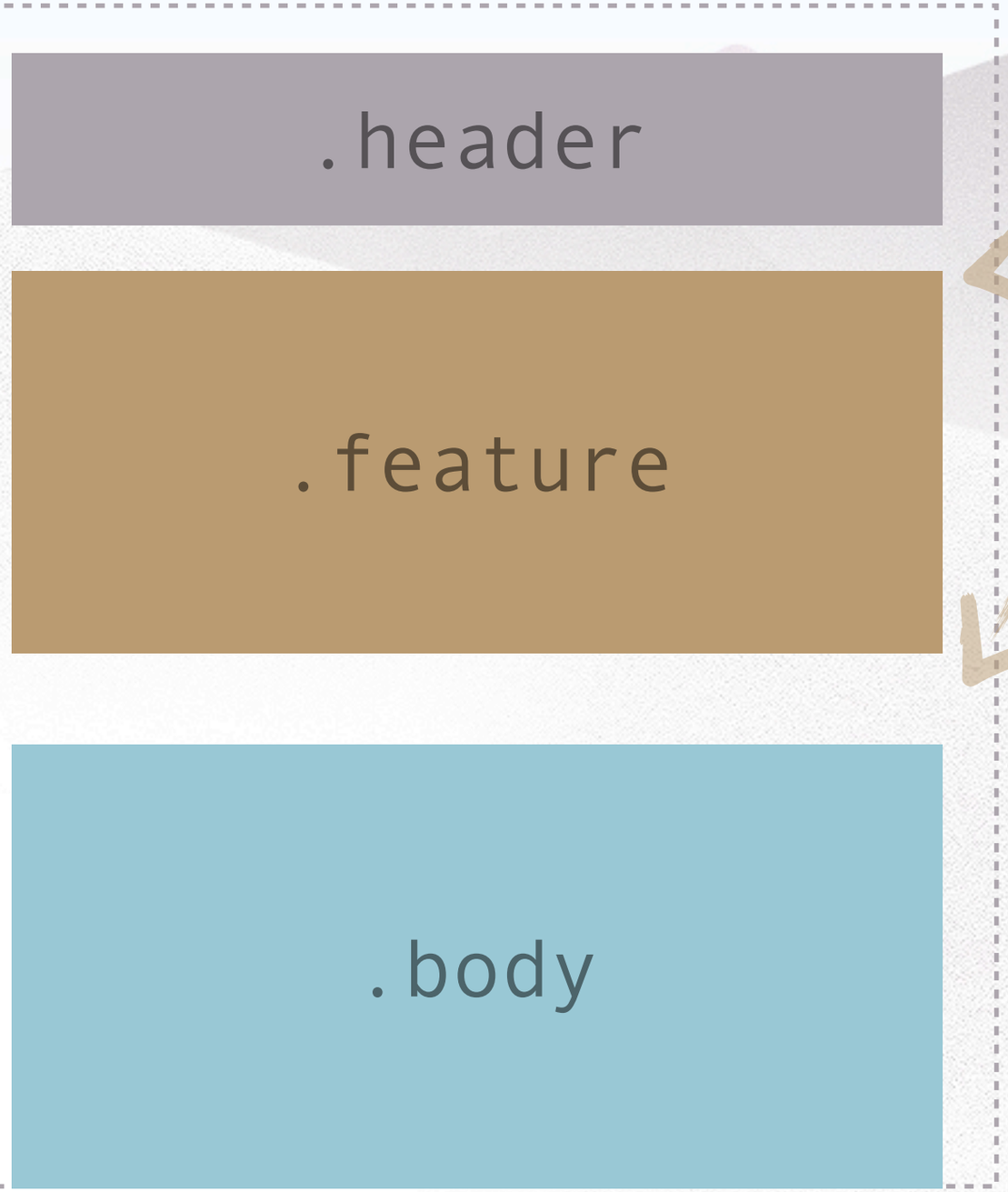
Protecting Your Layout

Specificity Problems

5

CROSS COUNTRY

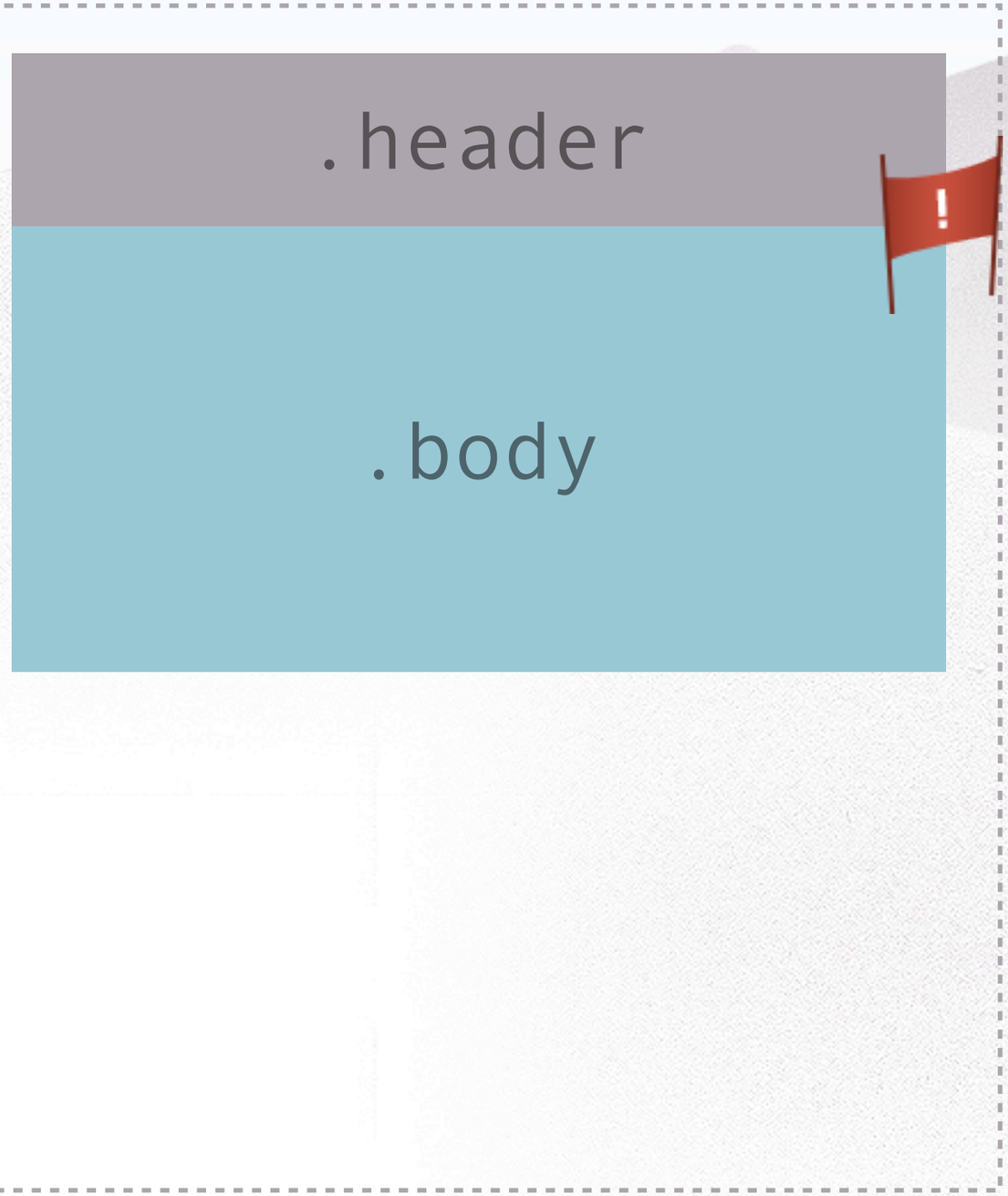
PROTECTING YOUR LAYOUT




```
.feature {
  margin: 20px 0 40px 0;
}
```


CROSS COUNTRY

PROTECTING YOUR LAYOUT




```
.feature {
  margin: 20px 0 40px 0;
}
```

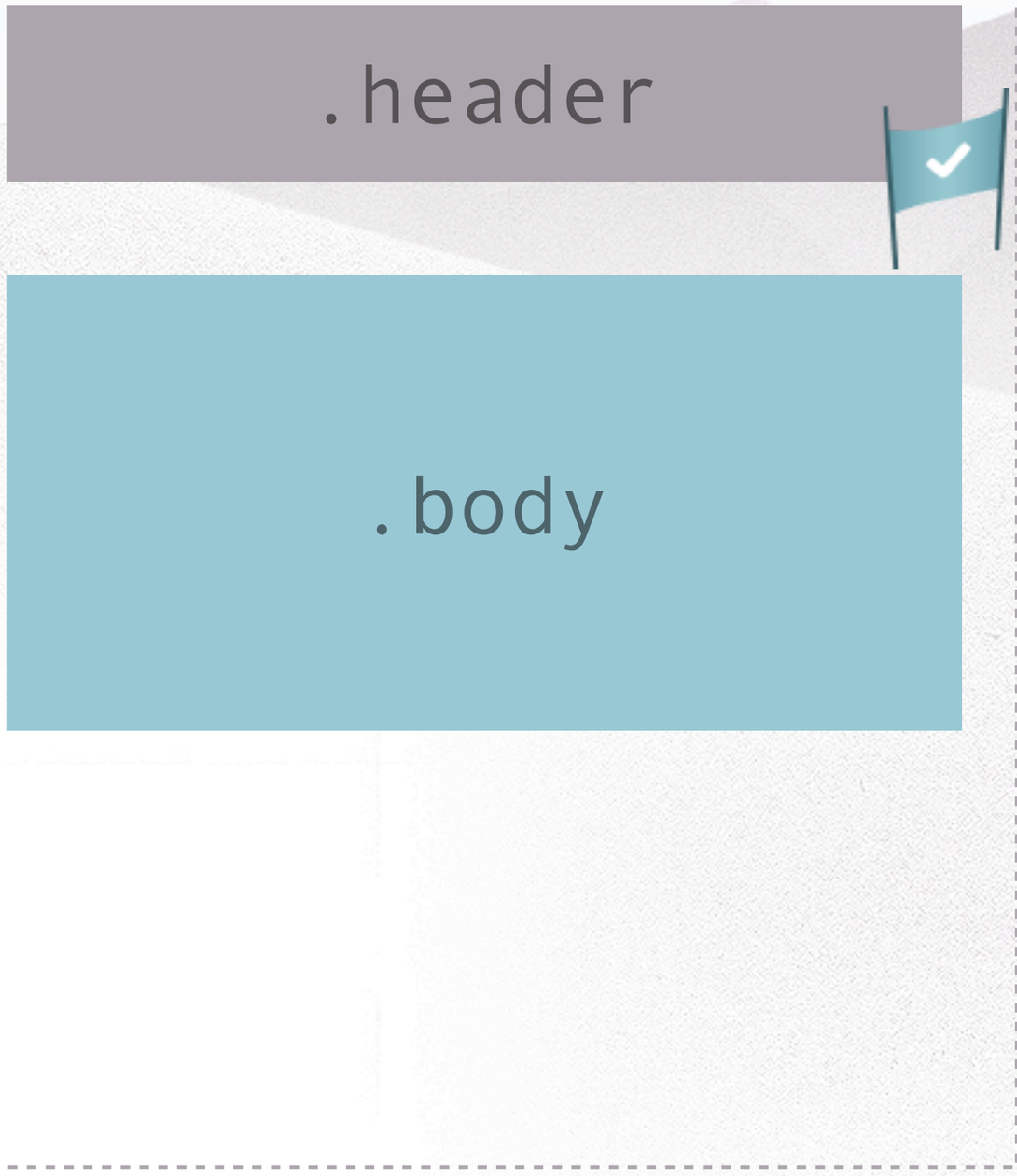

CROSS COUNTRY

PROTECTING YOUR LAYOUT


```
.header {
  margin: 20px 0 40px 0;
}
.feature {
  margin: 20px 0;
}
.body {
  margin: 10px 0;
}
```


CSS CROSS COUNTRY

PROTECTING YOUR LAYOUT




```
.header {
  margin: 20px 0 40px 0;
}
.feature {
  margin: 20px 0;
}
.body {
  margin: 10px 0;
}
```

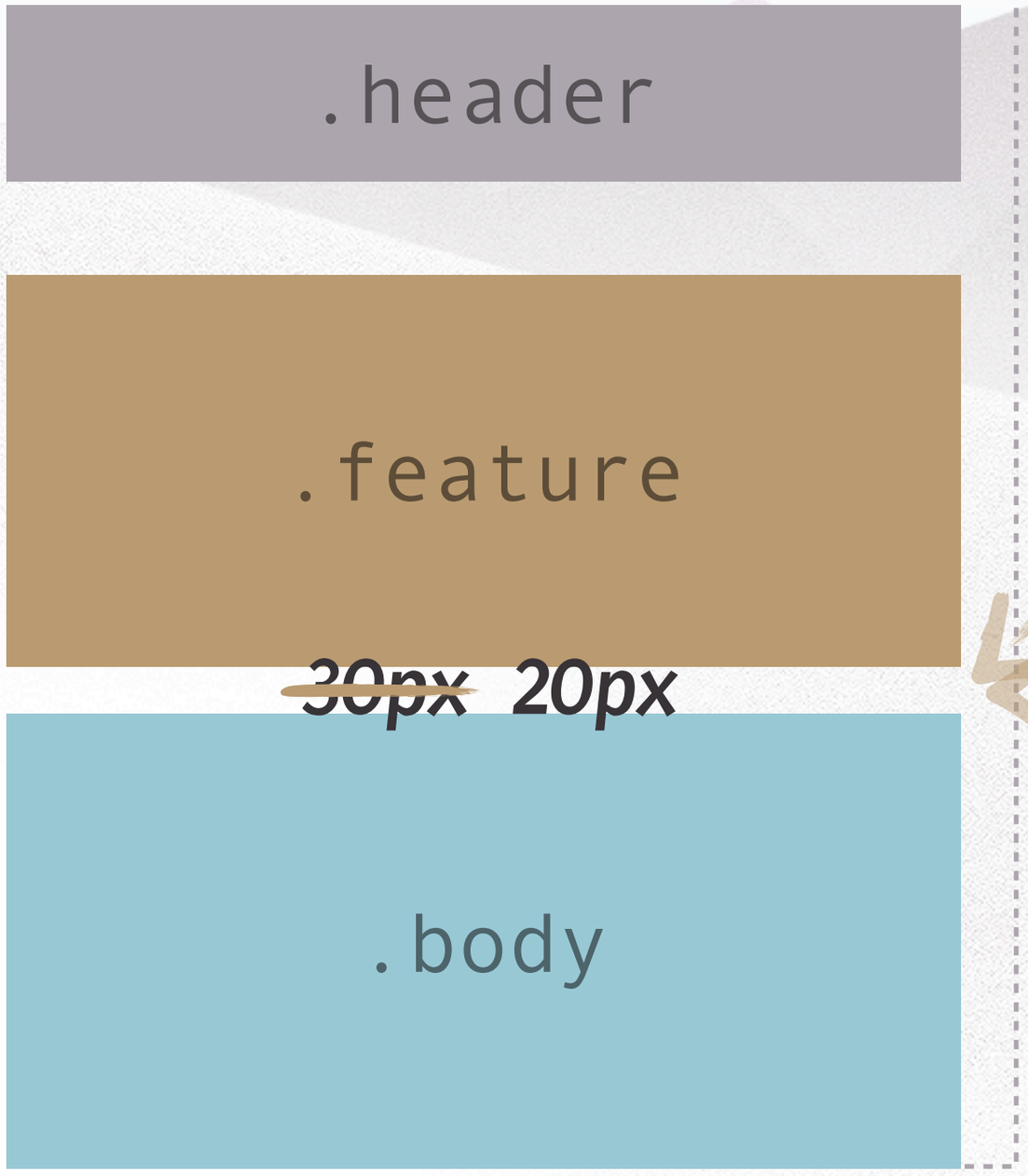

CSS CROSS COUNTRY

PROTECTING YOUR LAYOUT


```
.header {
  margin: 20px 0 40px 0;
}
.feature {
  margin: 20px 0;
}
.body {
  margin: 10px 0;
}
```


CSS CROSS COUNTRY

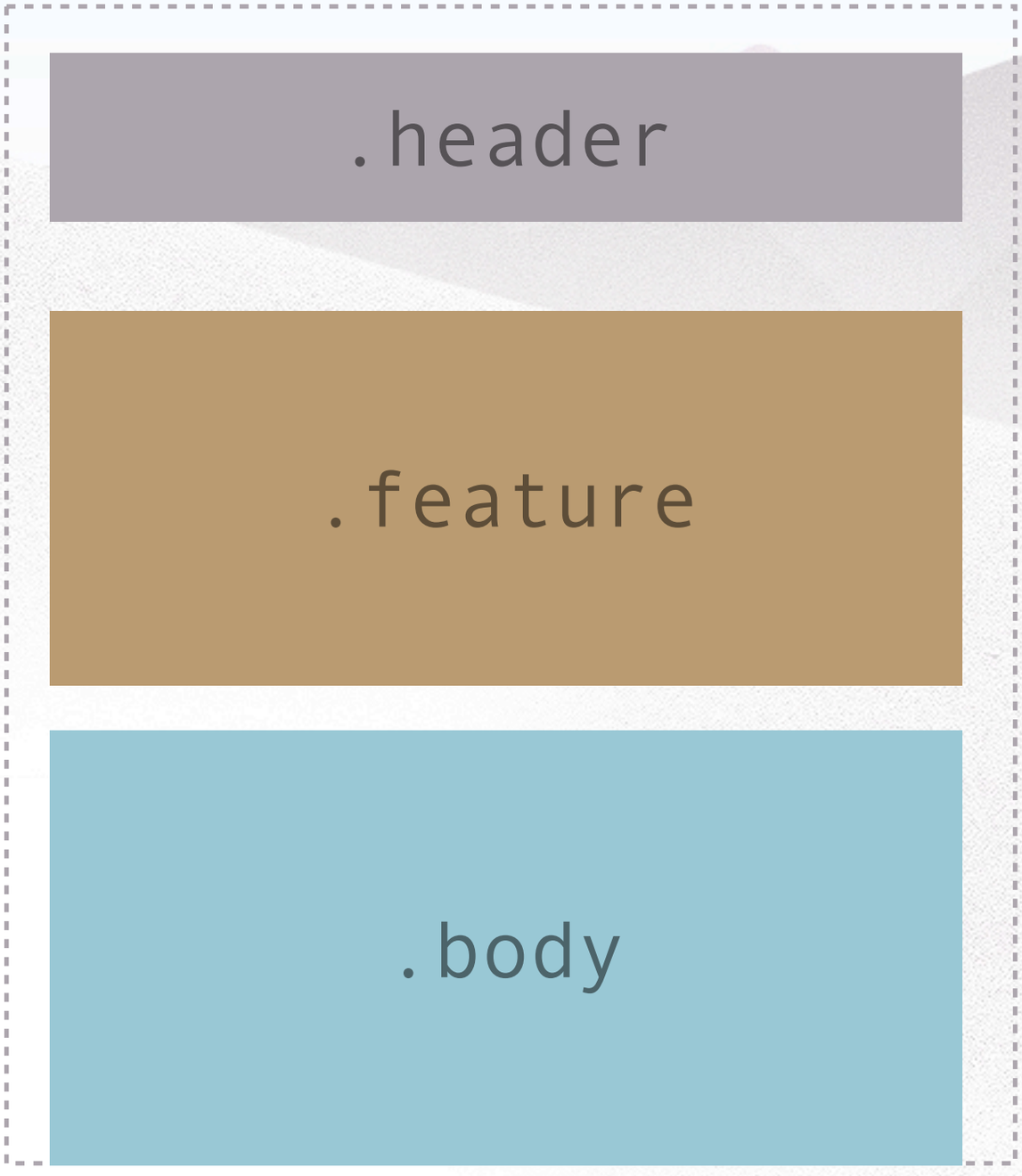
PROTECTING YOUR LAYOUT




```
.header {
  margin: 20px 0 40px 0;
}
.feature {
  margin: 20px 0;
}
.body {
  margin: 10px 0;
}
```


CSS CROSS COUNTRY

PROTECTING YOUR LAYOUT




```
.header {
  margin: 20px 0 40px 0;
}
.feature {
  margin: 20px 0;
}
.body {
  margin: 10px 0;
}
```


CSS CROSS COUNTRY

PROTECTING YOUR LAYOUT

Collapsing margins will not occur when one or more block element has:

- Padding or border
- Relative or absolute positioning
- A float left or right

COLLAPSING MARGINS

See the spec for more info:

Link #1

5

CSS CROSS COUNTRY

CSS SAFETY

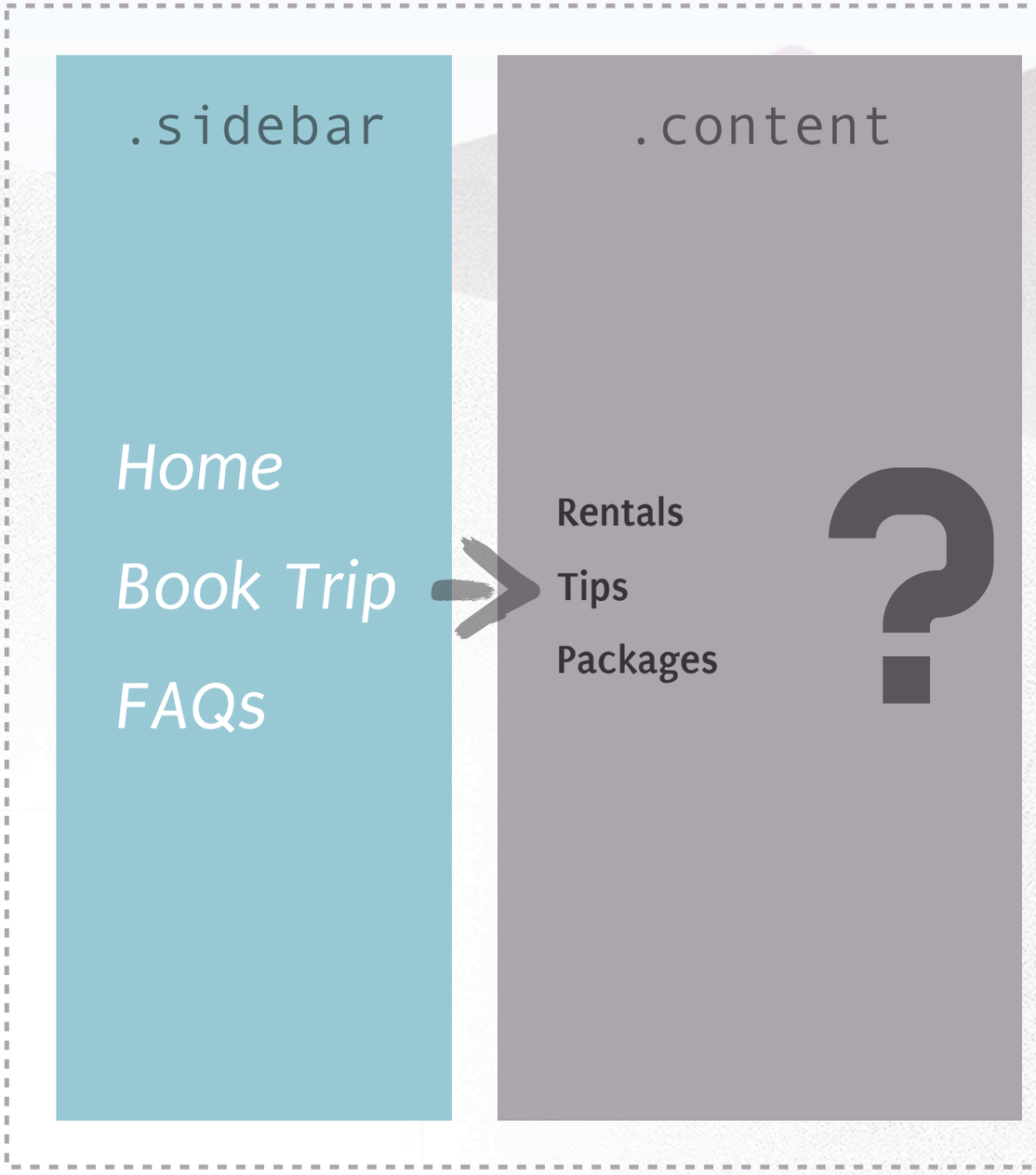
Protecting Your Layout

Specificity Problems

5

CROSS COUNTRY

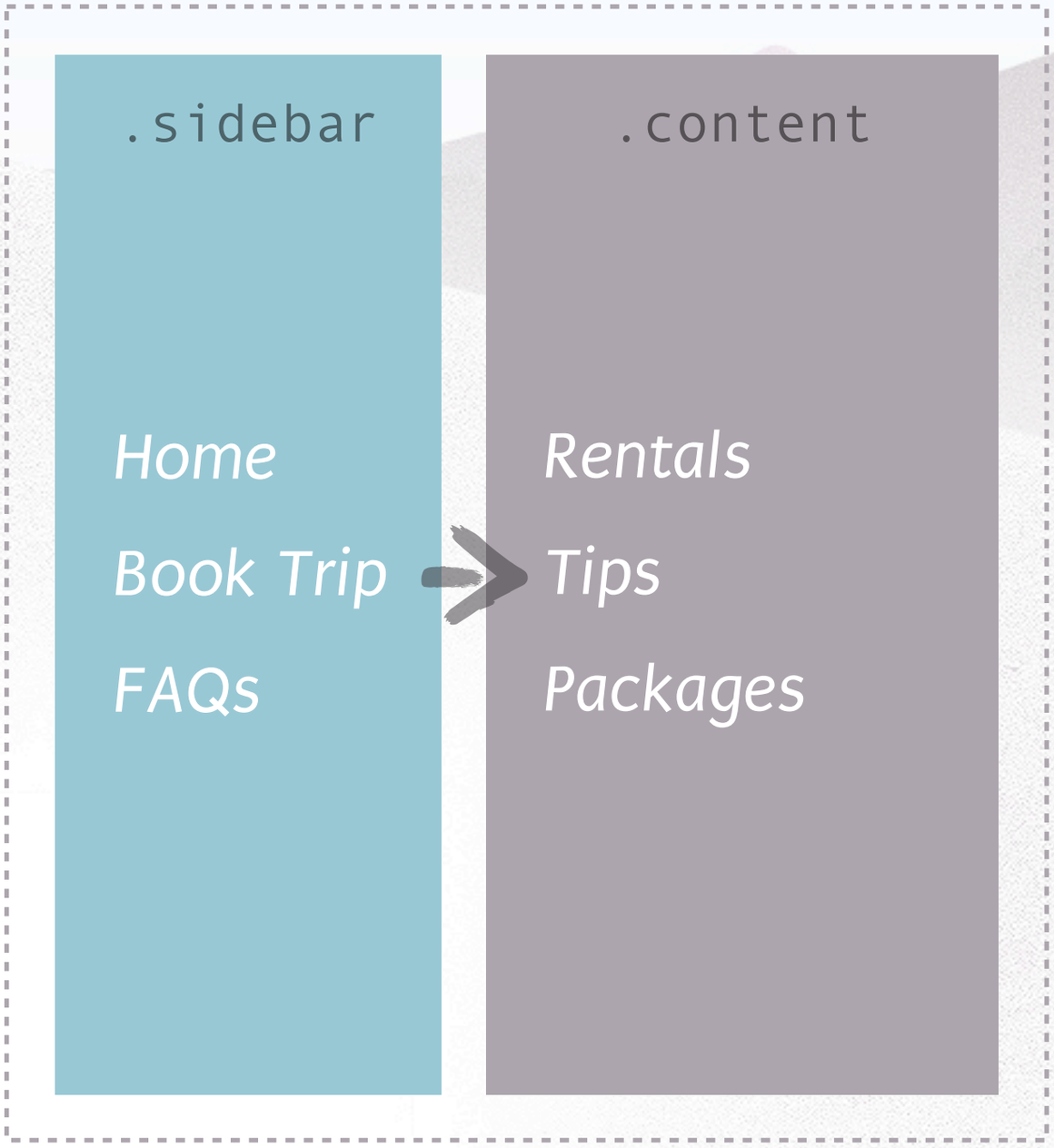
SPECIFICITY PROBLEMS




```
.sidebar ul li {
  font-style: italic;
  font-size: 14px;
  color: #fff;
  margin: 5px 0;
}
```


CROSS COUNTRY

SPECIFICITY PROBLEMS

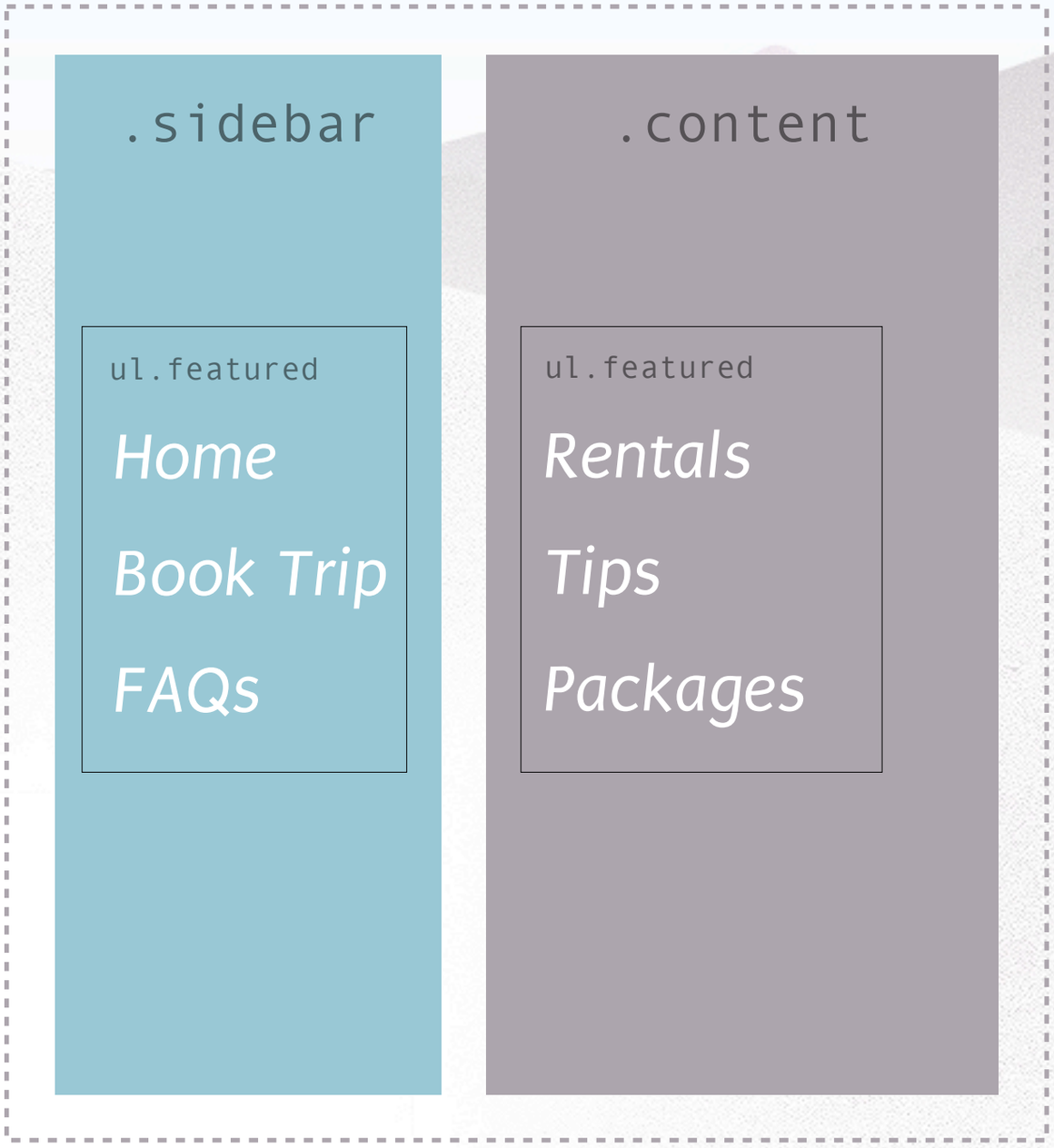



```
ul li {
  font-style: italic;
  font-size: 14px;
  color: #fff;
  margin: 5px 0;
}
```

5

CSS CROSS COUNTRY

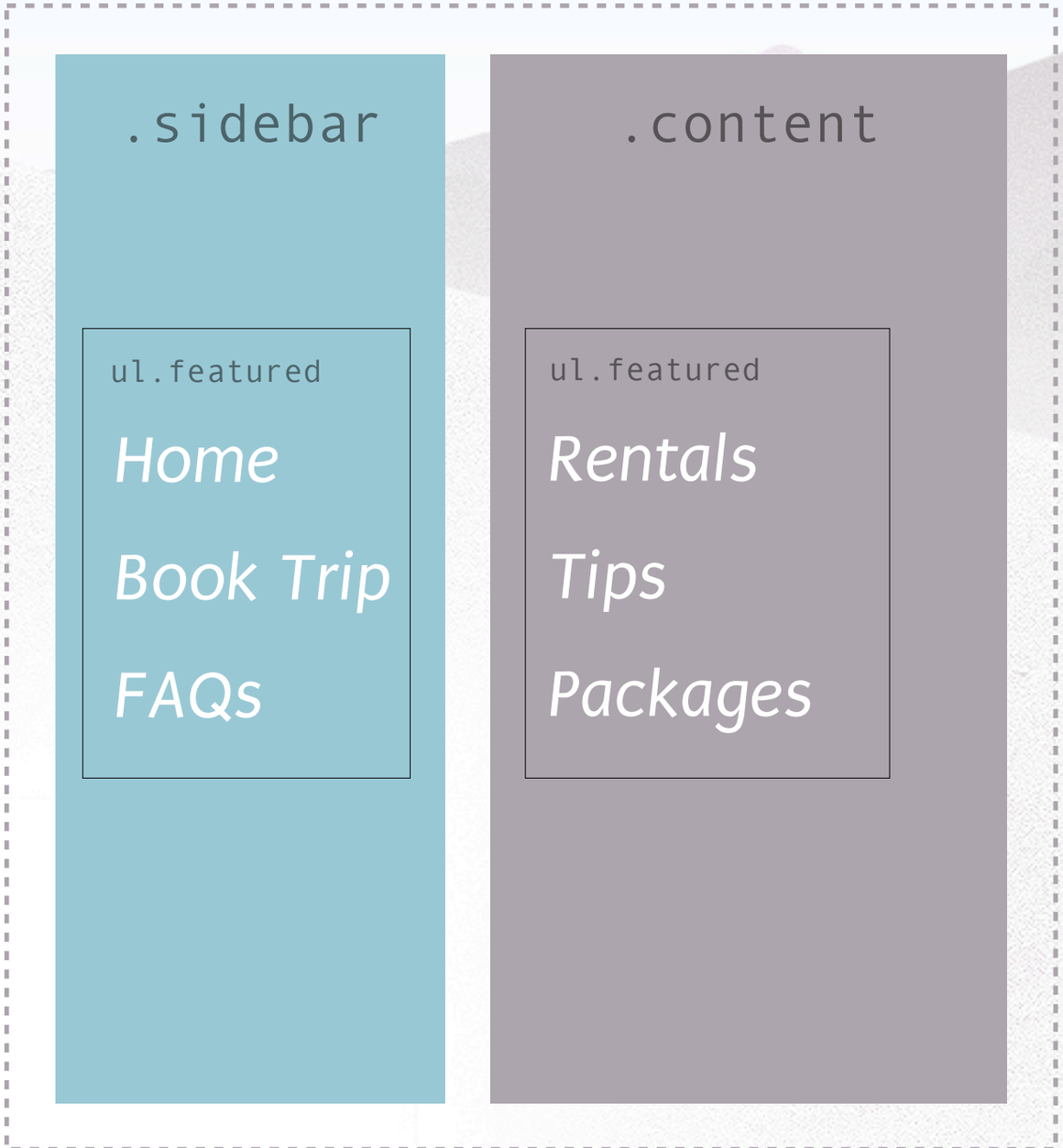
SPECIFICITY PROBLEMS




```
.featured li {
  font-style: italic;
  font-size: 14px;
  color: #fff;
  margin: 5px 0;
}
```


CSS CROSS COUNTRY

SPECIFICITY PROBLEMS




```
.featured li {
  font-style: italic;
  font-size: 14px;
  color: #fff;
  margin: 5px 0;
}
ul li {
  font-size: 12px;
  margin: 3px 0;
}
```


CSS CROSS COUNTRY

SPECIFICITY PROBLEMS

Resets & normalization:

- Eric Meyer's Reset CSS: *Link #2*
- Normalize.css: *Link #3*

CROSS COUNTRY

IMAGE ISSUES

IMAGE ISSUES

Image Use

Image Cropping

IMAGE USE

Layout or content?

```
<h4>Rental Products</h4>
<ul>
  <li class="snowmobile"></li>
</ul>
```

?

```
.snowmobile li {
  background: url(snowmobile.jpg);
  height: 300px;
  width: 400px;
}
```

IMAGE USE

Write it as an inline image instead:

```
<h4>Rental Products</h4>
<ul>
  <li><img src="snowmobile.jpg" alt="Snowmobile" /></li>
</ul>
```

IMAGE USE

```
<h1>Feel the rhythm, feel the rhyme, get on up, it’s
bobsled time!</h1>
<img src="divider.jpg" alt="Divider" />
```

CROSS COUNTRY

IMAGE USE

Better as a background image:

```
<h1>Feel the rhythm, feel the rhyme, get on up, it's
bobsled time!</h1>
```

```
h1 {
  background: url(divider.jpg);
  margin-bottom: 10px;
  padding-bottom: 10px;
}
```

6

CSS CROSS COUNTRY

IMAGE USE

Review:

- Content should be marked up as inline images
- Layout elements should be defined as background images

CROSS COUNTRY

IMAGE ISSUES

Image Use

Image Cropping

CROSS COUNTRY

IMAGE CROPPING

```
<h4>Rental Products</h4>
<ul class="rental">
  <li><img src="snowboard.jpg" alt="Snowboard" /></li>
  ...
```

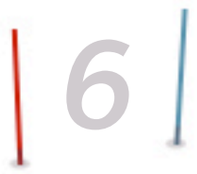


IMAGE CROPPING

6

images courtesy: http://sxc.hu/profile/shortsands

CSS CROSS COUNTRY

IMAGE CROPPING

```
<h4>Rental Products</h4>
<ul class="rental">
  <li><img src="snowboard.jpg" alt="Snowboard" /></li>
  ...
```

```
.rental img {
  height: 300px;
  width: 400px;
}
```

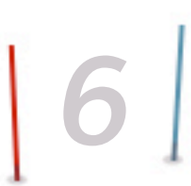


IMAGE CROPPING

CROSS COUNTRY

IMAGE CROPPING

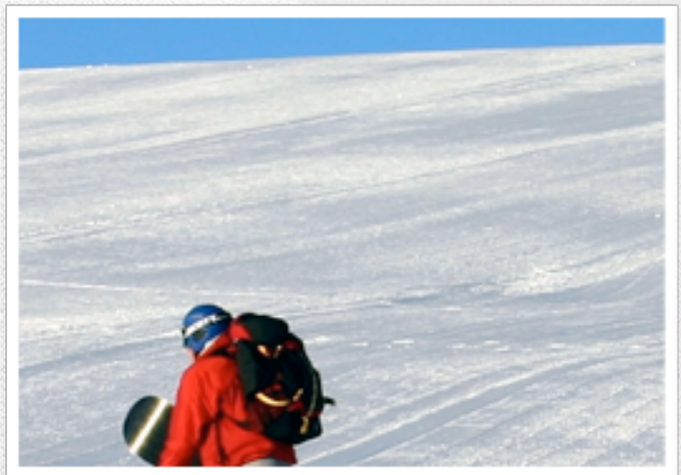
Overflow crop method:

```
<h4>Rental Products</h4>
<ul class="rental">
  <li class="crop">
    <img src="snowboard.jpg" alt="Snowboard" />
  </li>
```

```
.crop {
  height: 300px;
  width: 400px;
  overflow: hidden;
}
```


CSS CROSS COUNTRY

IMAGE CROPPING



CROSS COUNTRY

IMAGE CROPPING

```
<h4>Rental Products</h4>
<ul class="rental">
  <li class="crop">
    <img src="snowboard.jpg" alt="Snowboard" />
  </li>
```

```
.crop {
  height: 300px;
  width: 400px;
  overflow: hidden;
}
.crop img {
  height: auto;
  width: 400px;
}
```

IMAGE CROPPING

6

CSS
CROSS COUNTRY

IMAGE CROPPING

?

CSS
CROSS COUNTRY

IMAGE CROPPING

```
<h4>Rental Products</h4>
<ul class="rental">
  <li class="crop">
    <img src="snowboard.jpg" alt="Snowboard" />
  </li>
```

```
.crop {
  height: 300px;
  width: 400px;
  overflow: hidden;
}
.crop img {
  height: 300px;
  width: auto;
}
```

IMAGE CROPPING

Alternatives:

- Resize images to a square < height and width of all of your images
- Resize them server-side
- Provide image-uploading instructions in your CMS

FLUID & RESPONSIVE LAYOUTS

Richard Rutter's technique:

Link #1

6

CSS CROSS COUNTRY


CROSS COUNTRY

SPRIGHTLY SLALOMS

SPRIGHTLY SLALOMS

Image Replacement

Sprites

IMAGE REPLACEMENT

Add descriptive text to image-replaced elements:

```
<a href="#" class="logo"></a>
```

```
.logo {
  background: url(logo.png);
  display: block;
  height: 100px;
  width: 200px;
}
```

CROSS COUNTRY

IMAGE REPLACEMENT

Add descriptive text to image-replaced elements:

```
<a href="#" class="logo">Sven's Snowshoe Emporium</a>
```

```
.logo {
  background: url(logo.png);
  display: block;
  height: 100px;
  width: 200px;
}
```

CSS CROSS COUNTRY

IMAGE REPLACEMENT

Text-indent hides the placeholder text:

```
<a href="#" class="logo">Sven's Snowshoe Emporium</a>
```

```
.logo {
  background: url(logo.png);
  display: block;
  height: 100px;
  width: 200px;
  text-indent: -9999px;
}
```

CSS CROSS COUNTRY

SPRIGHTLY SLALOMS

Image Replacement

Sprites

SPRITES

```
<a href="#" class="logo">Sven's Snowshoe Emporium</a>
```

```
.logo {
  background: url(logo.png);
  display: block;
  height: 100px;
  width: 200px;
  text-indent: -9999px;
}
.logo:hover, .logo:focus {
  background: url(hover.png);
}
```

CSS CROSS COUNTRY

SPRITES

Issues with swapping background images:

- Adds an extra HTTP request
- Image is not preloaded

SPRITES

Let's combine the images into one file:

CSS CROSS COUNTRY

SPRITES

defaults to: 0 0

Using background-position:

```
.logo {
  background: url(logo.png);
  display: block;
  height: 100px;
  width: 200px;
  text-indent: -9999px;
}
.logo:hover, .logo:focus {
  background-position: 0 -100px;
}
```

x-axis change

y-axis change

CSS CROSS COUNTRY

SPRITES

defaults to: 0 0

Using background-position:

```
.logo {
  background: url(logo.png);
  display: block;
  height: 100px;
  width: 200px;
  text-indent: -9999px;
}
.logo:hover, .logo:focus {
  background-position: 0 -100px;
}
```

x-axis change

y-axis change

CSS CROSS COUNTRY

SPRITES

Advantages to the sprite approach:

- Reduces number of HTTP image requests
- Removes loading flash / need for preload

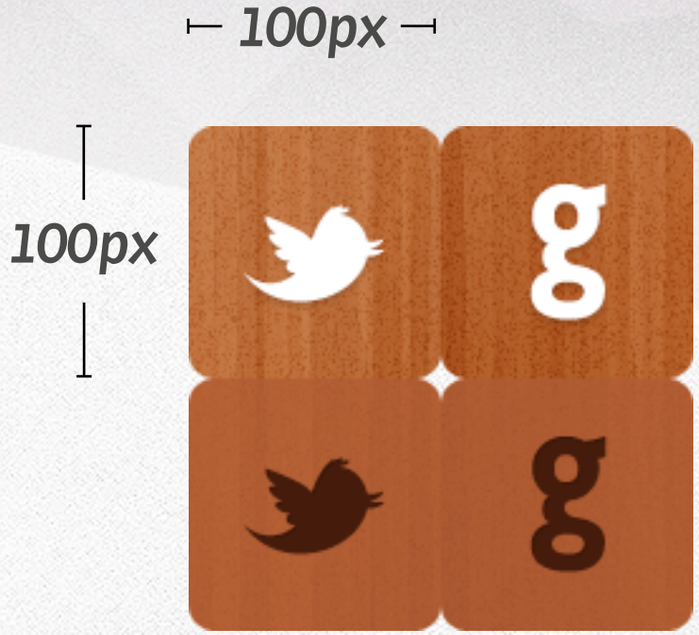
Gmail

GitHub

CROSS COUNTRY

SPRITES

Multiple images & states:



CROSS COUNTRY

SPRITES

Multiple images & states:

```
<ul class="group">
  <li><a href="#" class="twitter">Twitter</a></li>
  <li><a href="#" class="github">Github</a></li>
</ul>
```

```
li {
  float: left;
  margin-right: 10px;
}
```

Twitter Github 

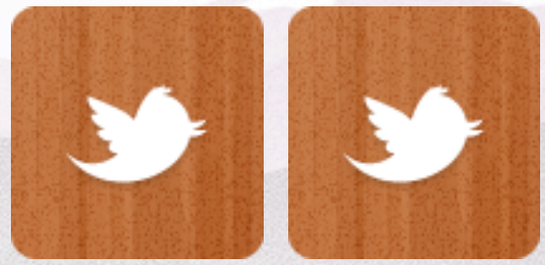
assumes the default list styles are reset

CROSS COUNTRY

SPRITES

Multiple images & states:

```
.twitter, .github {
  background: url(social.png);
  display: block;
  height: 100px;
  width: 100px;
  text-indent: -9999px;
}
```



CSS CROSS COUNTRY

SPRITES

Multiple images & states:

```
.twitter, .github {
  background: url(social.png);
  display: block;
  height: 100px;
  width: 100px;
  text-indent: -9999px;
}
.github {
  background-position: -100px 0;
}
```

CROSS COUNTRY

SPRITES

Multiple images & states:

```
.twitter:hover, .twitter:focus {
  background-position: 0 -100px;
}
.github:hover, .github:focus {
  background-position: -100px -100px;
}
```

EASIER SPRITES

Tools for simplifying workflow:

Link #1

CSS CROSS COUNTRY

SPRITES

base64 encoding:

- Directly embed images into your CSS
- IE8+

Link #2

```
background-image: url(...;
```


CROSS COUNTRY


CROSS COUNTRY

PSEUDO SITZMARK

PSEUDO SITZMARK

Pseudo Classes

Pseudo Elements

PSEUDO CLASSES

Altering the last item:

```
<ul>
  <li><a href="#lodging">Lodging</a></li>
  <li><a href="#rentals">Rentals</a></li>
  <li class="last"><a href="#lessons">Lessons</a></li>
</ul>
```

```
li {
  border-bottom: 1px solid #aaa;
}
.last {
  border-bottom: 0;
}
```

- LODGING
- RENTALS
- LESSONS

CSS CROSS COUNTRY

PSEUDO CLASSES

Simplifying with last-child:

```
<ul>
  <li><a href="#lodging">Lodging</a></li>
  <li><a href="#rentals">Rentals</a></li>
  <li><a href="#lessons">Lessons</a></li>
</ul>
```

```
li {
  border-bottom: 1px solid #aaa;
}
li:last-child {
  border-bottom: 0;
}
```

- LODGING
- RENTALS
- LESSONS

CSS CROSS COUNTRY

PSEUDO CLASSES

Allow you to conditionally select an element based on state or position:

- Start with a colon (:)

```
.twitter:hover, .twitter:focus {
  background-position: 0 -100px;
}
.github:hover, .github:focus {
  background-position: -100px -100px;
}
```


CROSS COUNTRY

PSEUDO CLASSES

Zebra striping:

```
<ul>
  <li><a href="#lodging">Lodging</a></li>
  <li class="even"><a href="#rentals">Rentals</a></li>
  <li><a href="#lessons">Lessons</a></li>
  <li class="even"><a href="#menu">Menu</a></li>
</ul>
```

```
.even {
  background-color: #444245;
}
```

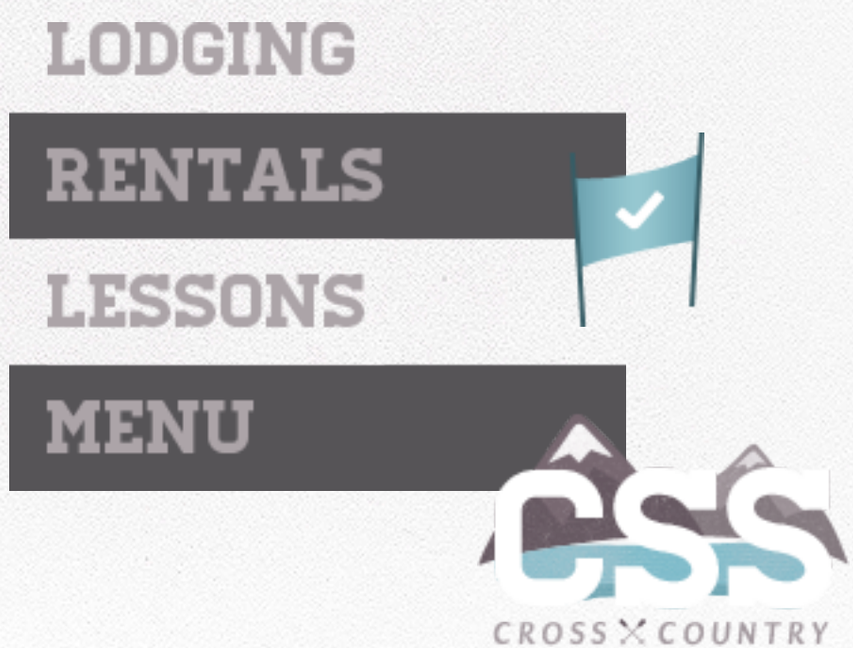
CSS CROSS COUNTRY

PSEUDO CLASSES

Simplifying with nth-child:

```
<ul>
  <li><a href="#lodging">Lodging</a></li>
  <li><a href="#rentals">Rentals</a></li>
  <li><a href="#lessons">Lessons</a></li>
  <li><a href="#menu">Menu</a></li>
</ul>
```

```
li:nth-child(even) {
  background-color: #444245;
}
```



PSEUDO CLASSES

Simplifying with nth-child:

```
li:nth-child(odd) {
  background-color: #444245;
}
```

LODGING

RENTALS

LESSONS

MENU

CSS CROSS COUNTRY

PSEUDO CLASSES

Simplifying with nth-child:

```
li:nth-child(an+b) {
```

- Matches items in intervals of *a*, starting with the element at position *b* (or 0, if *b* isn't set)

```
li:nth-child(2n) { /* Even */
```

```
li:nth-child(2n+1) { /* Odd */
```


CROSS COUNTRY

PSEUDO CLASSES

A selection of useful selectors:

```
:hover / :focus / :active / :visited

:first-child / :last-child / :only-child

:nth-child() / :nth-of-type()
```

PSEUDO-ER

For a full list and support:

Links #1 & #2

CSS CROSS COUNTRY

PSEUDO SITZMARK

Pseudo Classes

Pseudo Elements

PSEUDO ELEMENTS

Ending the last paragraph with a decorative element:

```
<article>
  <p>Coffee? Hah! Our cocoa is far better.</p>
  <p>Visit from 4-5 for cocoa happy hour!&#x2744;</p>
</article>
```

Coffee? Hah! Our cocoa is far better.

Visit from 4-5 for cocoa happy hour!❄

CROSS COUNTRY

PSEUDO ELEMENTS

Ending the last paragraph with a decorative element:

```
<article>
  <p>Coffee? Hah! Our cocoa is far better.</p>
  <p>Visit from 4-5 for cocoa happy hour!</p>
</article>
```

```
article p:last-child:after {
  content: '\2744';
}
```

Coffee? Hah! Our cocoa is far better.
Visit from 4-5 for cocoa happy hour!❄

CSS CROSS COUNTRY

PSEUDO ELEMENTS

A selection of useful pseudo elements:

`:before` / `:after`	*IE8+*
`:first-letter` / `:first-line`	

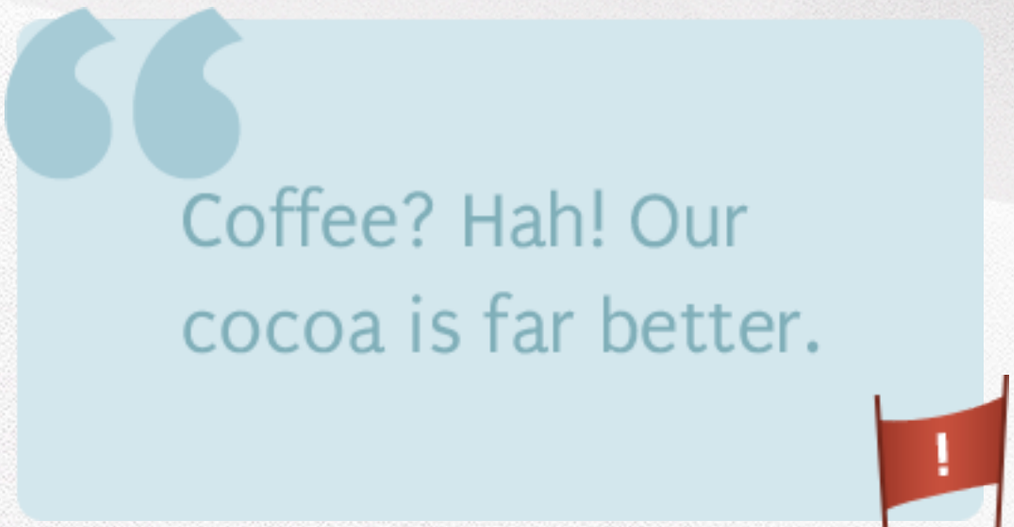
CROSS COUNTRY

PSEUDO ELEMENTS

positioned element

```
<blockquote>
  Coffee? Hah! Our cocoa is far better.
  <span></span>
</blockquote>
```

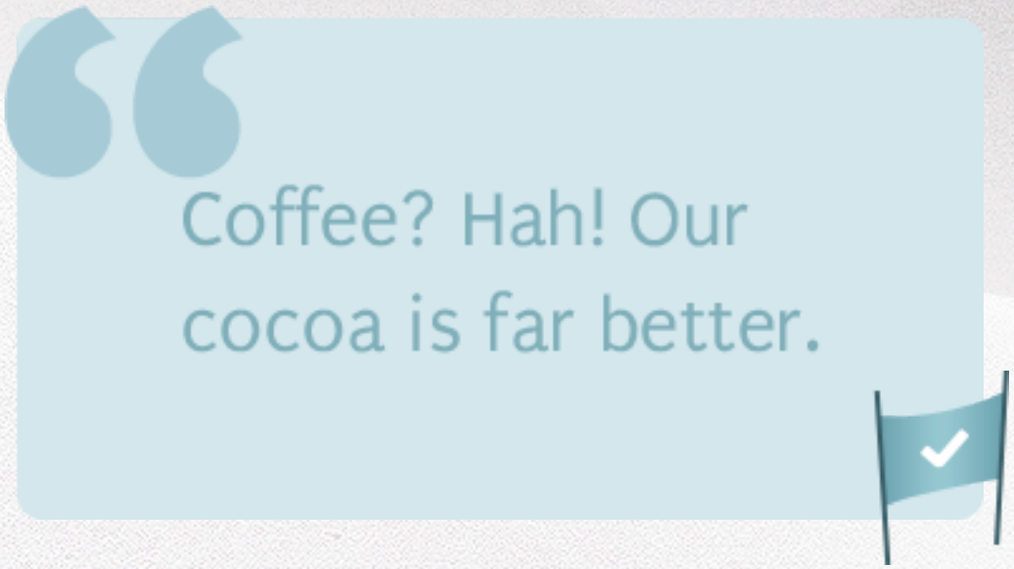
```
blockquote span {
  background: url(quote.png);
  display: block;
  height: 30px;
  width: 30px;
  position: absolute;
  top: -5px;
  left: -5px;
}
```



PSEUDO ELEMENTS

```
<blockquote>
  Coffee? Hah! Our cocoa is far better.
</blockquote>
```

```
blockquote:before {
  content: '';
  background: url(quote.png);
  display: block;
  height: 30px;
  width: 30px;
  position: absolute;
  top: -5px;
  left: -5px;
}
```



PSEUDO ELEMENTS

:before and :after effectively add two additional places per element on the page for styling

PSEUDO FUN

See what you can pull off using pseudo elements:

Link #3

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CSS CROSS COUNTRY


CROSS COUNTRY