

LMSGI

10. Construcción web avanzada

Nuestra página más atractiva

The elixir
mixer, Alice



Here's the handout menu with the elixir specials. Wow, the design is a lot different than the rest of the page: it's thin, the text is centered, and there are red headings, an aquamarine border around the whole thing, and even some cocktail graphics at the top.

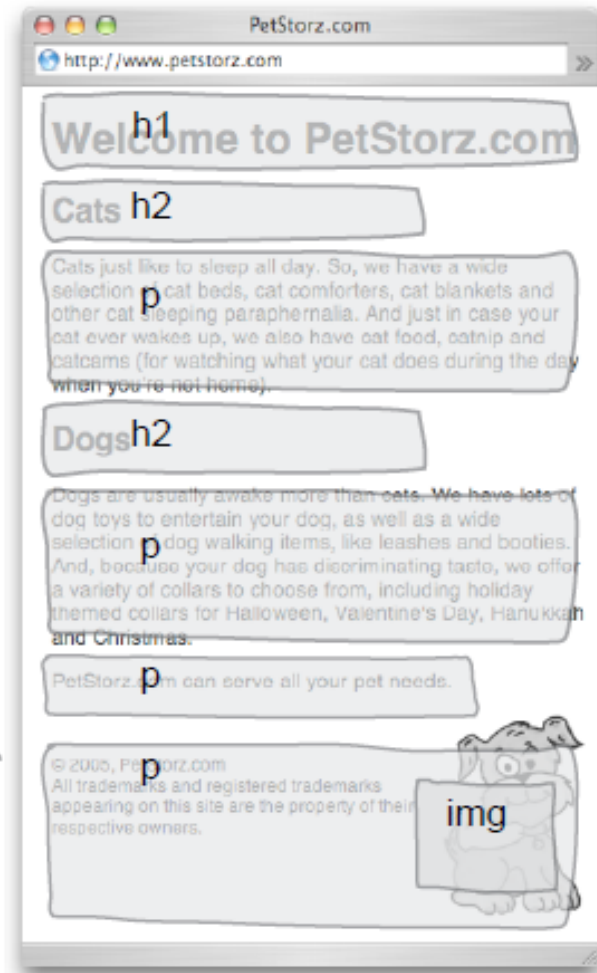


Agrupar elementos en secciones lógicas

This is a pretty normal-looking page: lots of headings, paragraphs, and an image in there.

But by just focusing on the structure of the page, you can't really tell a whole lot about the page. What elements make up the header? Is there a footer on the page? What are the content areas?

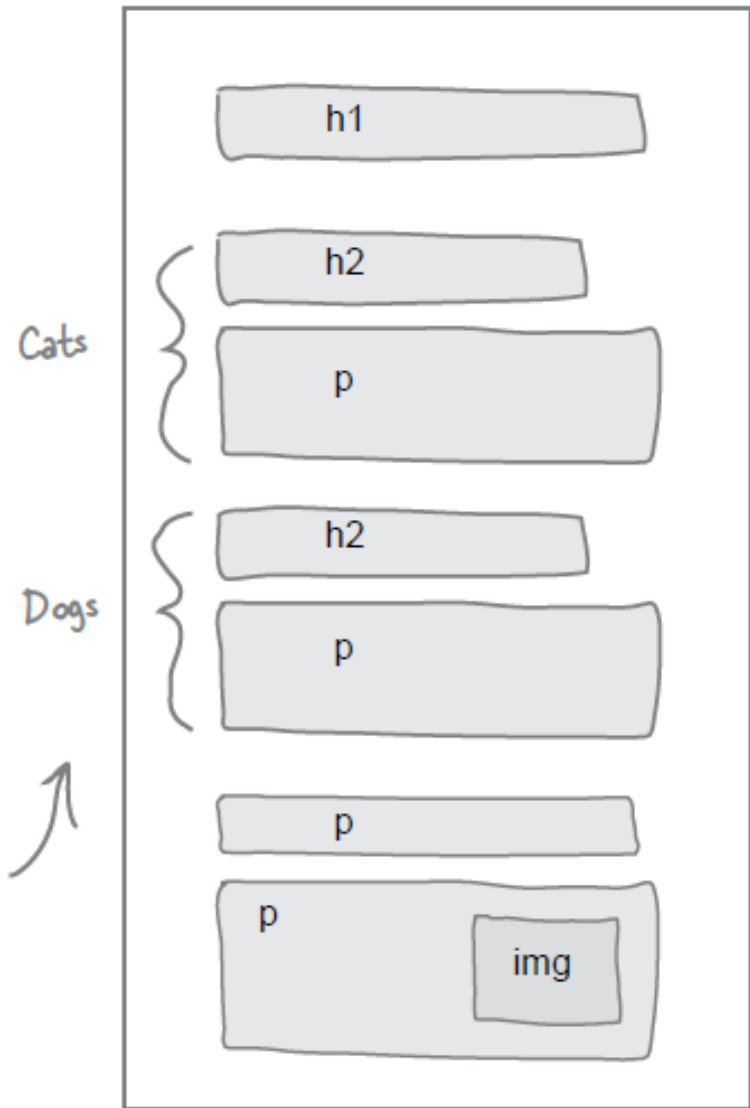
We've drawn an outline of the PetStorz page.



Pensaremos cómo dividir la página...

The PetStorZ page has two main content areas, one for cats, and one for dogs. It has some other areas too, but we'll come back to those.

In this case, both the cats and dogs sections consist of two elements, a heading and a paragraph. But often these groupings can contain many more elements.

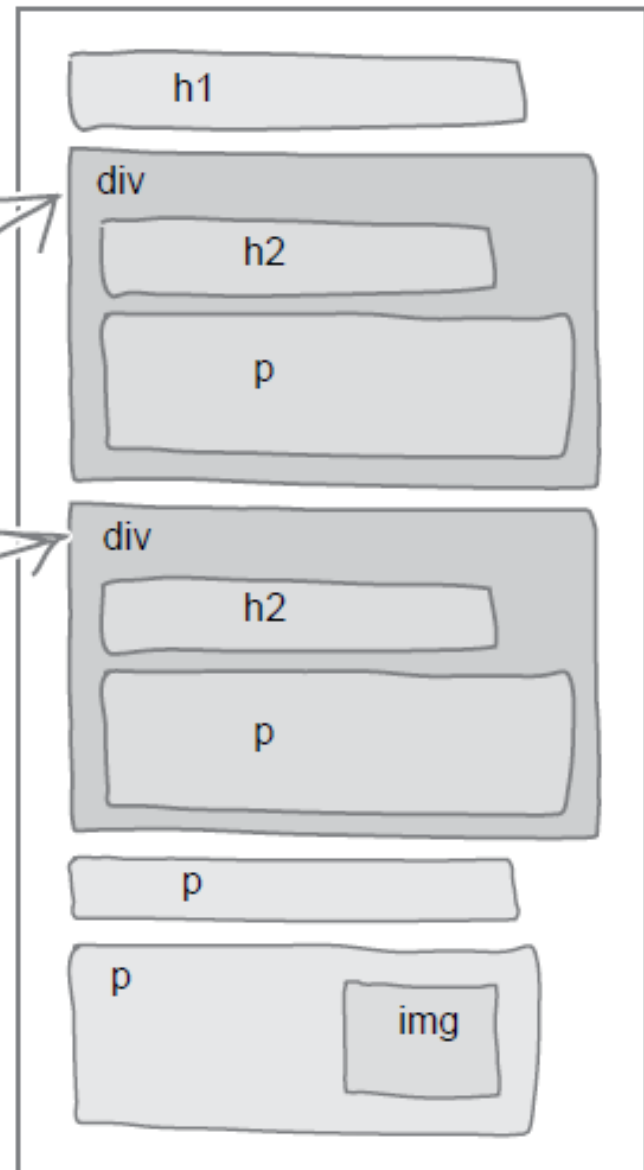


Usaremos divs para marcar la página

Let's nest the elements in each grouping in a `<div>` element.

Here's our cat group.

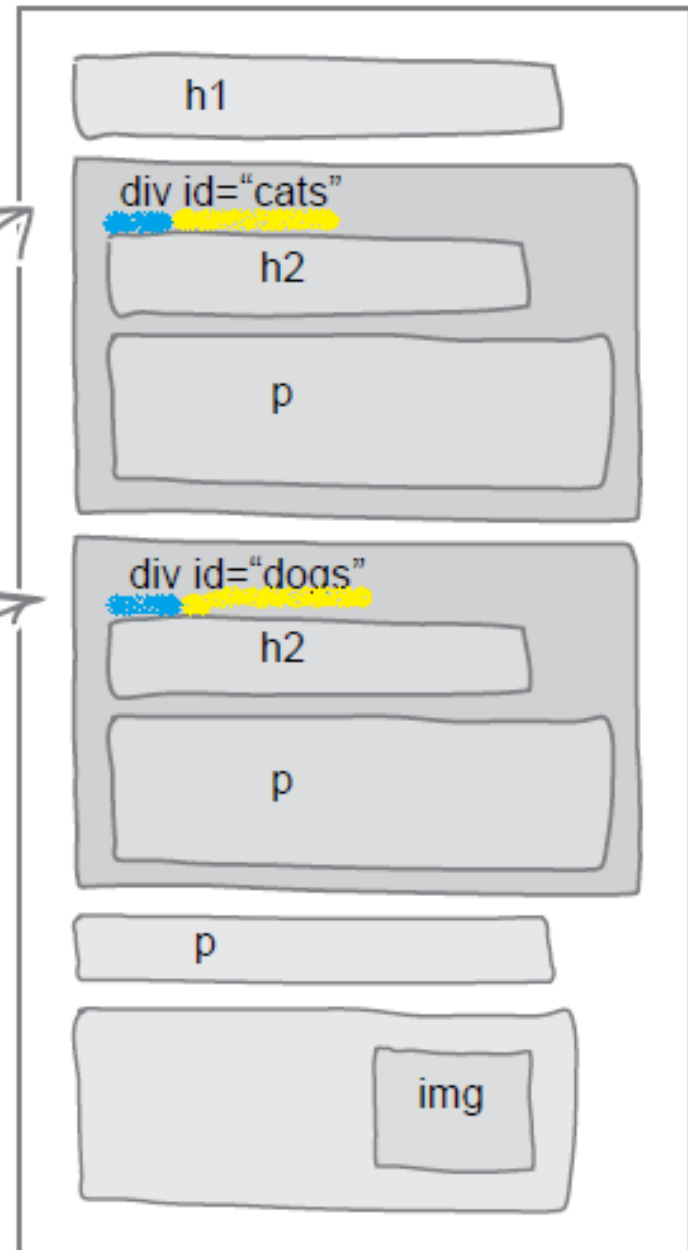
And here's our dog group.



Etiquetando

Here we've added an id of "cats" to the first <div> to indicate what the logical section is for.

And likewise for dogs



Añadiendo estilos

Here we have two rules, one for each <div>. Each <div> is selected by an id selector.

Now the <div>s have a little style.

By setting the background on the <div>, it also shows through the elements contained in the <div>.

The elements in the <div> will also inherit some properties from the <div>, just as any child element does (like font-size, color, etc).

Each rule sets the background-image property. For cats we have a leopard image, and for dogs we have a mutt image.

```
#cats {  
  background-image: url(leopard.jpg);  
}  
  
#dogs {  
  background-image: url(mutt.jpg);  
}
```

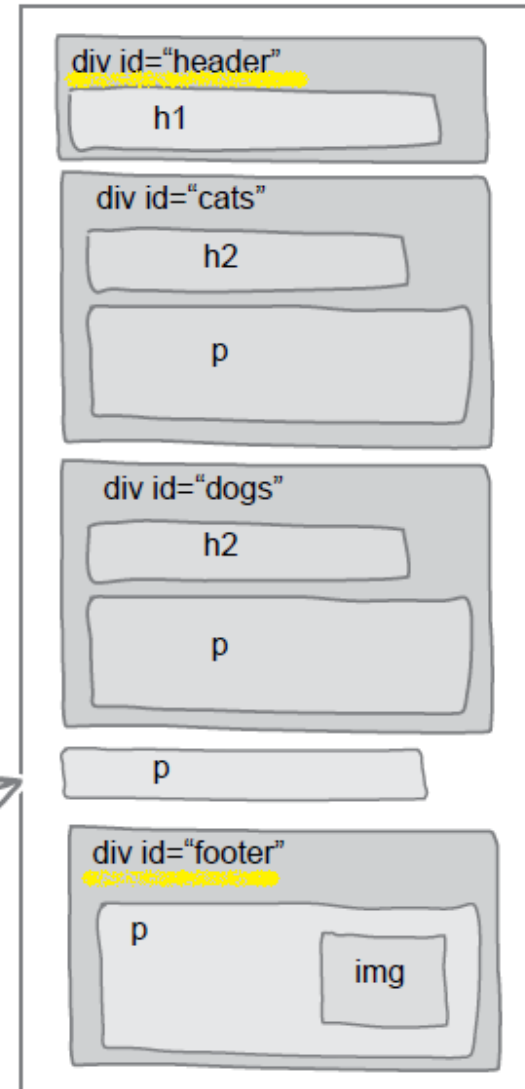


Definiendo aún más la estructura

Now we've added another `<div>` with an id indicating this is the header of the page.

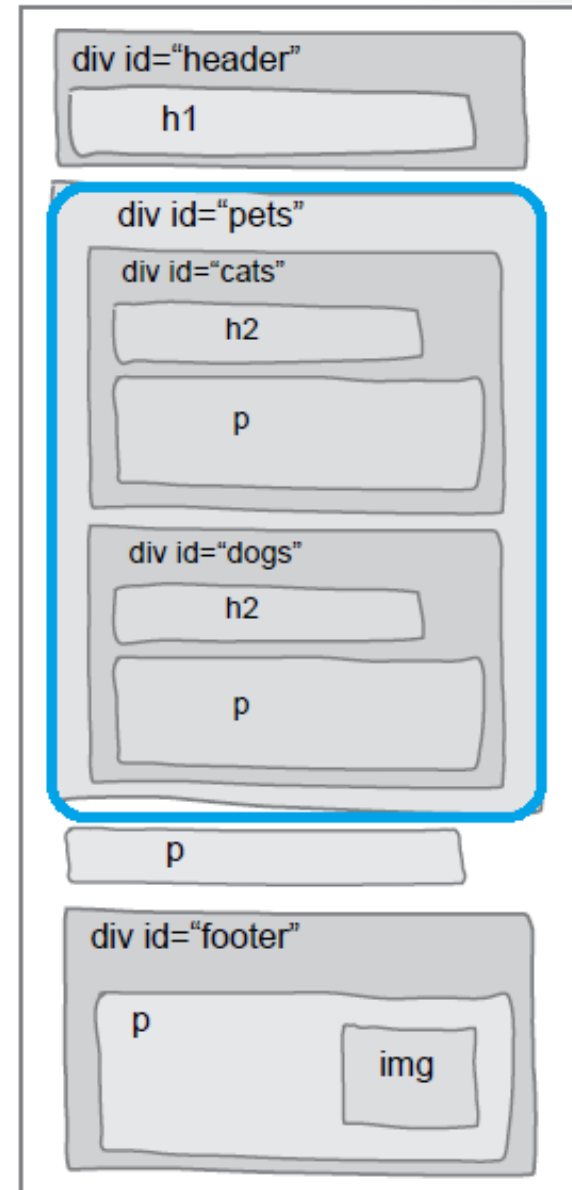
And another indicating the footer of the page.

Adding this structure through `<div>`s can even help you think through your page design. For instance, does this lone `<p>` really need to be here?



Añadimos estructura sobre la estructura

Now we've marked up this HTML so that we know there is a logical section in the page with "pets" content in it. Further, that "pets" section has two logical subsections, one for "cats" and one for "dogs".



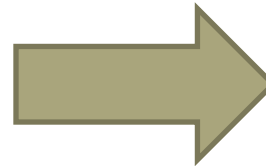
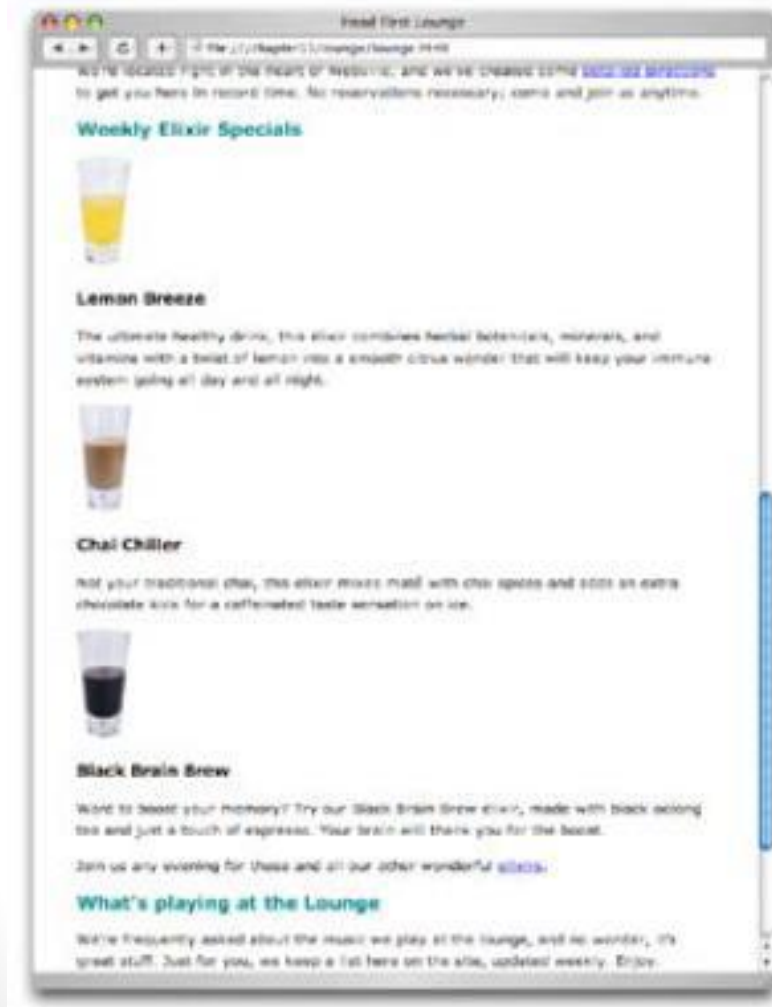
Algunos consejos

- Un ***div*** es un contenedor, pero además, servirá para posicionar los elementos en cada lugar
- Ayuda a separar secciones lógicas: da ***claridad*** y ***estilo***
- No debemos abusar de **<div>** en las páginas

No hay preguntas tontas

- Entonces, ¿un `<div>` actúa como un contenedor al que se le pueden introducir elementos para mantenerlos todos juntos?
- Yo ya estoy poniendo en mis páginas títulos, párrafos, etc., ¿debería también añadir un nivel más alto de estructura con divs?
- ¿Alguna vez se le pone un class a un div en lugar de un id?

Volvamos al lounge



Definiremos un div contenedor

```
<div id="elixirs">
```

```
  <h2>Weekly Elixir Specials</h2>
```

```
  <p>
```

```
    
```

```
  </p>
```

```
  <h3>Lemon Breeze</h3>
```

```
  <p>
```

```
    The ultimate healthy drink, this elixir combines  
    herbal botanicals, minerals, and vitamins with  
    a twist of lemon into a smooth citrus wonder  
    that will keep your immune system going all  
    day and all night.
```

```
  </p>
```

```
  <p>
```

```
    Join us any evening for these and all our  
    other wonderful
```

```
    <a href="beverages/elixir.html"  
      title="Head First Lounge Elixirs">elixirs</a>.
```

```
  </p>
```

```
</div>
```

← Here's the opening tag,
and we've given it an id of
"elixirs" to identify it.

Remember, we're just
showing a snippet of
HTML from the entire
file. When you open
"lounge.html", you'll see
all the markup for the
page.

←

← And here's the closing tag.

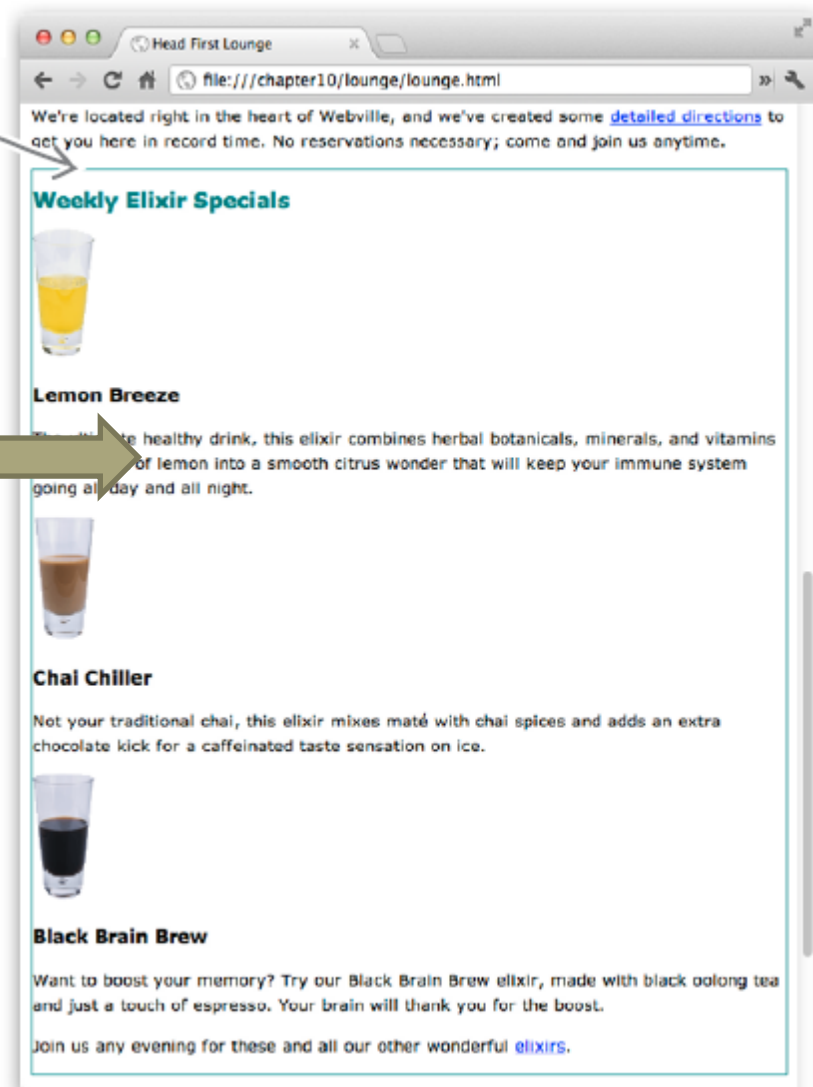
Daremos estilo al *borde*

```
#elixirs {  
  border-width: thin;  
  border-style: solid;  
  border-color: #007e7e;  
}
```

Here's the border that you just added to the elixirs <div> element.

You added a visible border to this <div>, but it still has no padding and no margin. We'll need to add that too.

Notice that the border goes around all the elements inside the <div> element. The <div> is a box like every other element, so when you add a border, the border goes around the content, which is all the elements in the <div>.



Añadiendo algo de estilo de verdad


There's a background image at the top.

The main heading and the paragraph text are black, while the drink names are a red color that matches the red in the logo.

The text and images are centered, and there's padding on the sides to add space between the text and the border.

The width of the elixirs handout is narrower than the rest of the page.

Weekly Elixir Specials




Lemon Breeze

The ultimate healthy drink, this elixir combines herbal botanicals, minerals, and vitamins with a twist of lemon into a smooth citrus wonder that will keep your immune system going all day and all night.

The line-height of the paragraphs looks a lot more like the default line height for the page (before we changed it in the last chapter).


The font family is a sans-serif font, just like the body font, so we don't have to change that. Remember that the <div> element and all the elements nested in it inherit the font family from the body.

This link is aquamarine.



Chai Chiller

Not your traditional chai, this elixir mixes maté with chai spices and adds an extra chocolate kick for a caffeinated taste sensation on ice.



Black Brain Brew

Want to boost your memory? Try our Black Brain Brew elixir, made with black oolong tea and just a touch of espresso. Your brain will thank you for the boost.

Join us any evening for these and all our other wonderful elixirs.

Alejandro Amat Reina

Definiendo el ancho

```
#elixirs {  
  border-width: thin;  
  border-style: solid;  
  border-color: #007e7e;  
  width: 200px;  
}
```

The width property lets you specify the width of the element's content area. Here, we're specifying that the content width be 200 pixels.

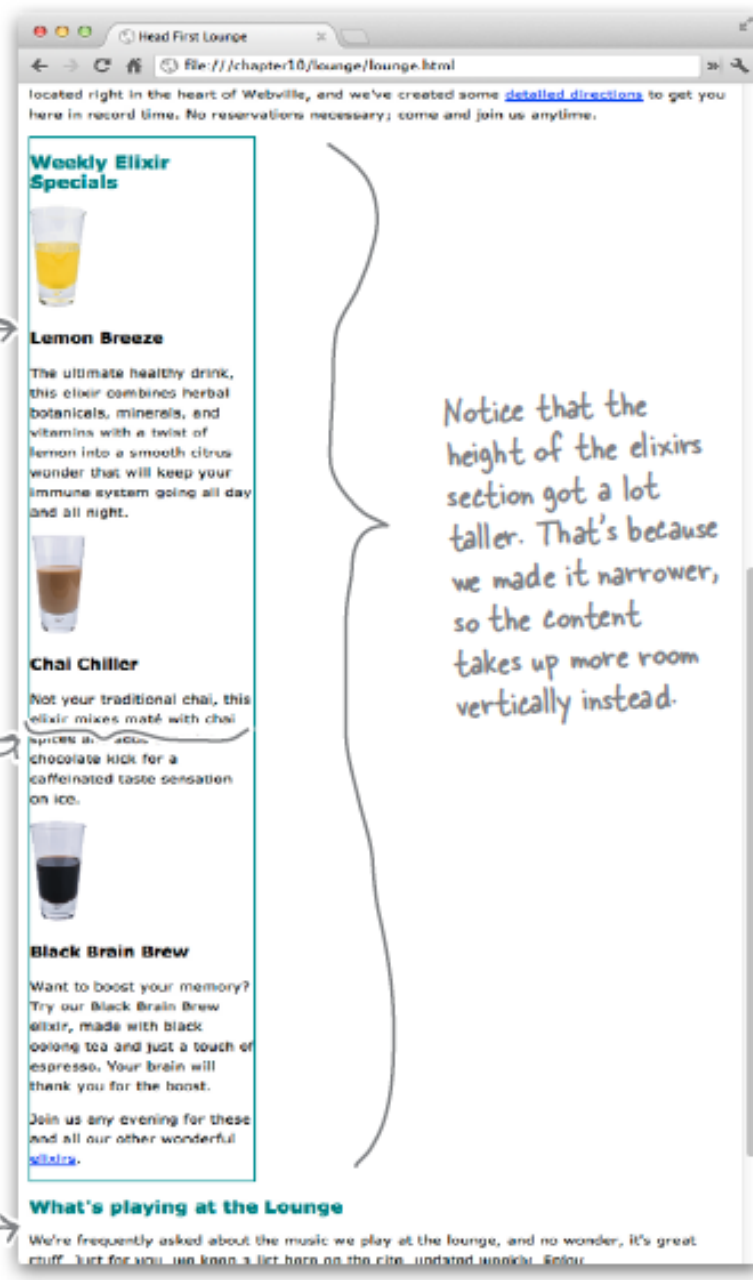
We're setting this on the elixirs <div>. So the content in the elixirs <div> will be 200 pixels wide, and the browser's layout rules will work to fit all the elements nested in the <div> within that width.

Lo probamos

Now all the content in the elixirs <div> fits into a space that is 200 pixels wide. It doesn't change, even if you make your browser window really wide, or really narrow. Try it!

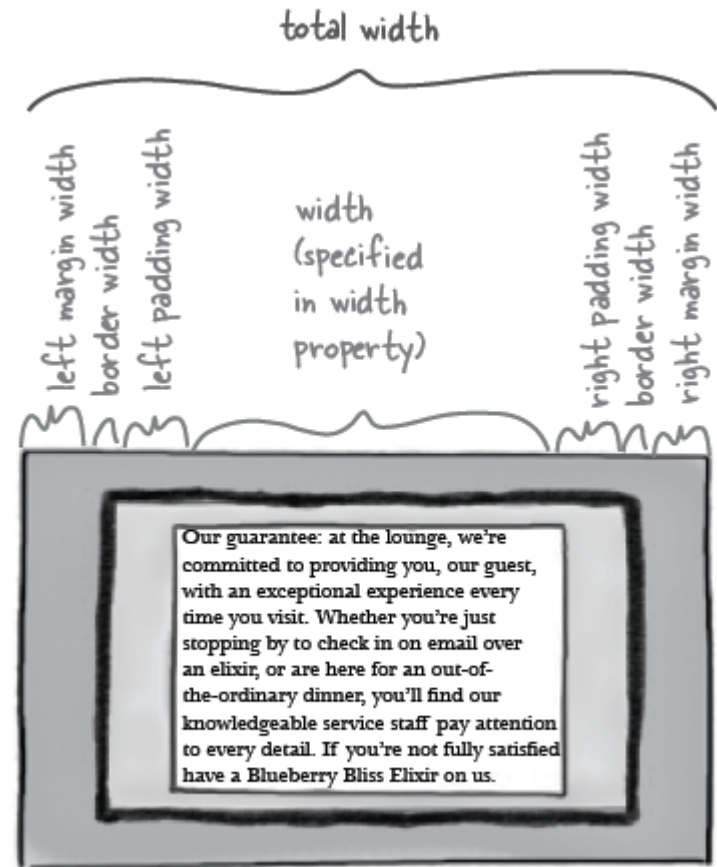
200 pixels

Compare the behavior of the <div> to that of the other elements when you make your browser window wide. The paragraphs automatically expand to fill the width of the browser. We'll talk about that more in a sec...

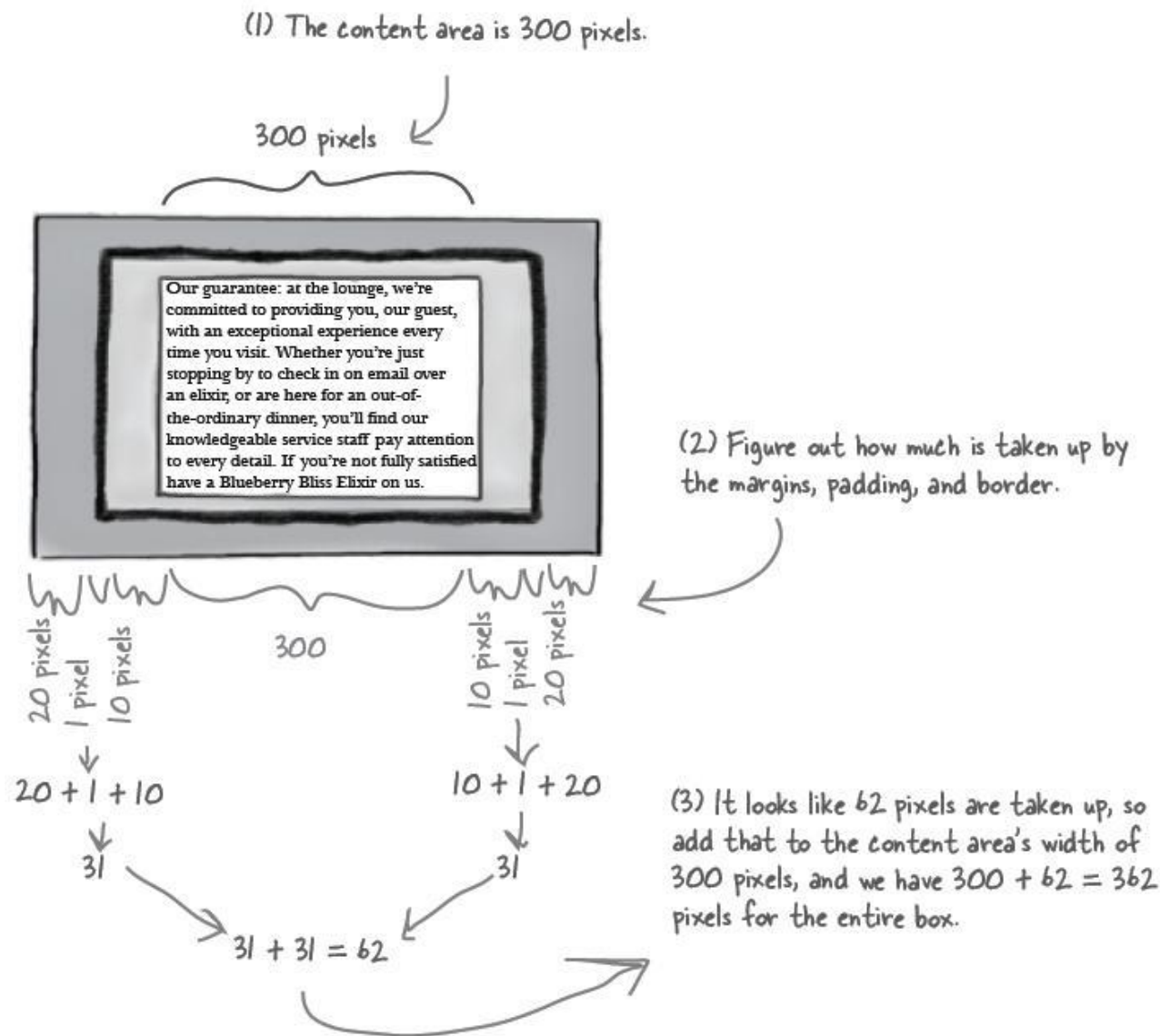


Ancho de un elemento

- ¿A qué nos referimos con el ancho (**width**)?
- ¿Es el área de contenido?
- ¿O el contenedor entero, incluyendo el **margin**, el **border** y el **padding**?
- **total width** = 2*margin width + 2*border width + 2*padding width + width



Cálculo del ancho total



Características de width

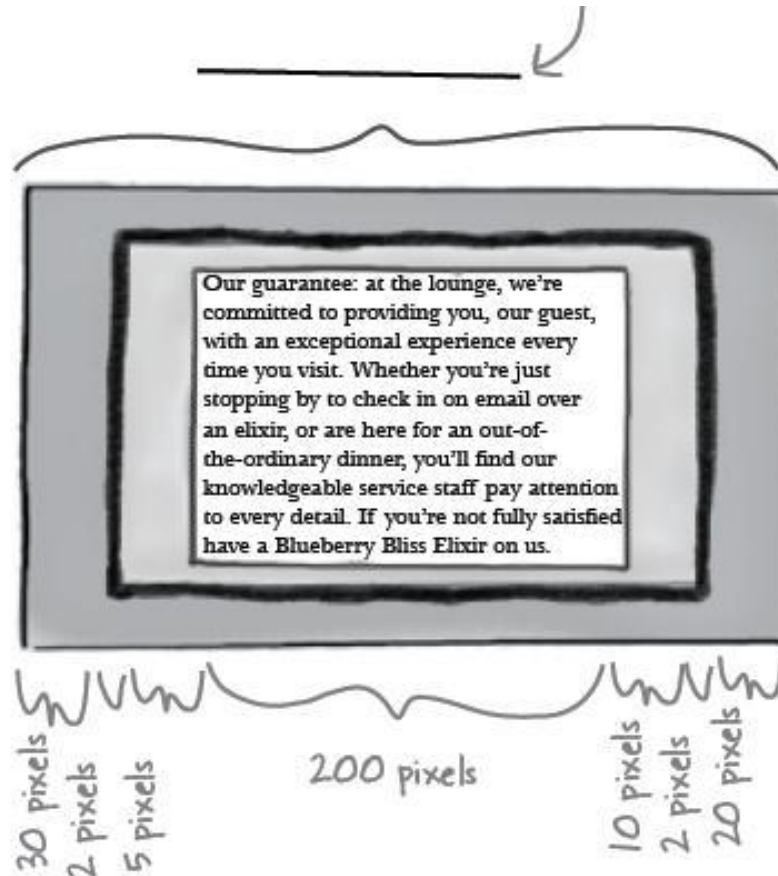
- El ancho por defecto, se adapta al espacio disponible, después de haber restado el ***padding, border y margin*** definido.
- ¿Qué pasa si no tenemos padding, ni border ni margin? Que cogerá todo el ancho de la caja.
- Para especificar el ancho (***width***):
 - Píxeles (***px***): medida absoluta
 - Porcentaje (***%***, ***em***): medida relativa
- ¿Cómo puedo especificar el ancho de un elemento completo incluyendo border, margen y padding? No puedes, para saber el ancho completo tienes que sumar los valores de todos ellos.

¿Qué pasa con height?

- No nos arriesgaremos a definir un ***height***
- Es posible que cortemos el contenido, si éste no es suficiente
- En general, no especificaremos la propiedad ***height***, para que se adapte a lo que necesite

Ejercicio

- Calcula el ***ancho total*** que ocupará este contenedor e identifica cada una de sus ***propiedades***:



Ejercicio

- El área de contenido tiene unas medidas totales de 400x400 píxeles. El margen superior es de 60px y el izquierdo y derecho son de 45px. El padding derecho e izquierdo es de 35px y arriba y debajo de 10px. El borde de la capa es de 3px. Calcula las dimensiones (***width*** y ***height***) de la capa principal.

No hay preguntas tontas

- Si no se indica la anchura de un elemento, entonces ¿qué ancho tiene?
- ¿Qué pasa si no tengo margin, padding ni border?
- ¿Qué unidades puedo utilizar para especificar los anchos?

Añadiendo estilos básicos

Remember, we're going to apply all this style to the elixirs <div> so that it only affects the <div> and the elements it contains, not the entire page.

```
#elixirs {  
  border-width:      thin;  
  border-style:      solid;  
  border-color:      #007e7e;  
  width:             200px;
```

```
  padding-right:     20px;  
  padding-bottom:    20px;  
  padding-left:      20px;
```

```
  margin-left:       20px;
```

```
  text-align:        center;
```

```
  background-image:   url(images/cocktail.gif);  
  background-repeat:  repeat-x;
```

```
}
```

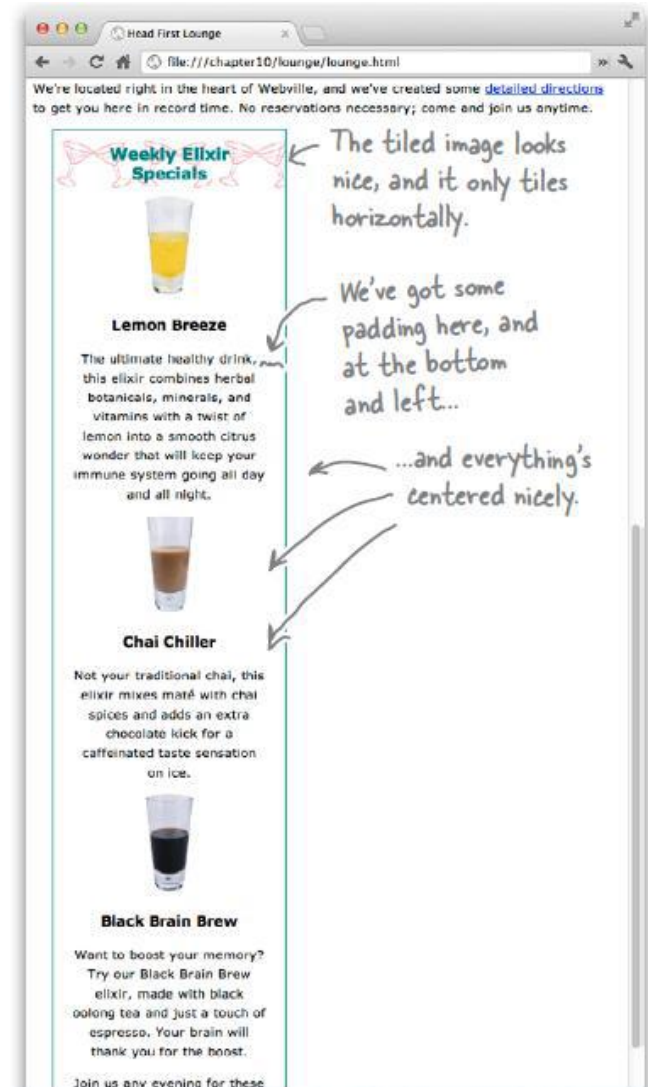
The default padding on a <div> is 0 pixels, so we're going to add some padding to provide a bit of space for the content. Notice that we're not adding any padding at the top because there's already plenty of room there, thanks to the default margin on the <h2> heading (look back at the last test drive and you'll see there's plenty of room above the <h2>). But we do need it on the right, bottom, and left.

We're adding some margin on the left to indent the elixirs from the rest of the page a bit. This is going to come in handy later...

Use text-align on block elements to align the text they contain. Here, we're going to center-align the text.

And finally we're specifying an image to use in the background, in this case the cocktail image. We're setting the background-repeat property to repeat-x, which will tile the image only in the horizontal direction.

Lo probamos



Text-align

- ¿Por qué las imágenes también aparecen centradas? ¿No debería afectar sólo al texto?
- La propiedad text-align afecta a todos los elementos hijos del bloque donde se aplique.
- En el ejemplo anterior se aplica en el div, por lo que todo el contenido del div se centra.
- La propiedad text-align no se puede aplicar a elementos en línea.

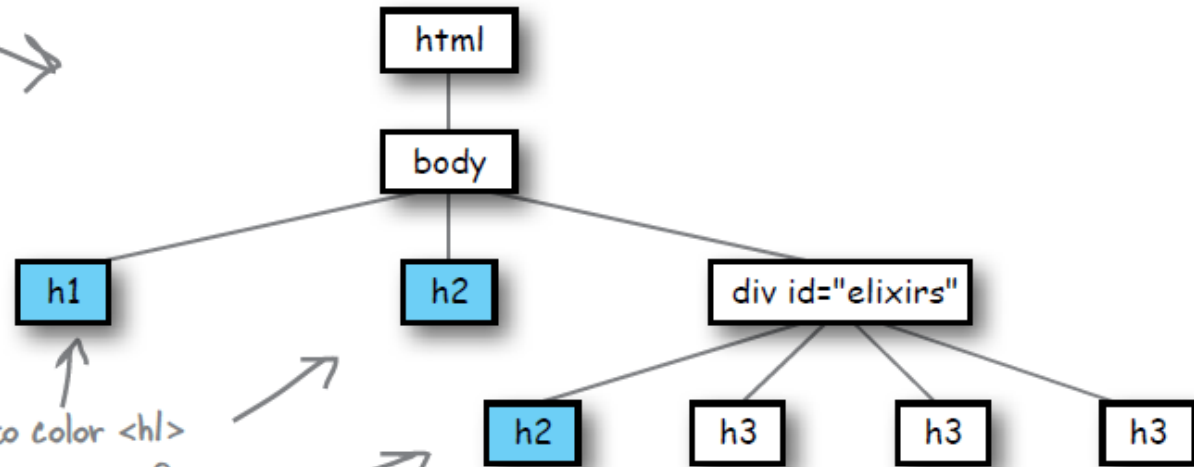
Herencia en la alineación

- El texto del div del ejemplo anterior está dentro de otros elementos en bloque (h1, p, etc.). Entonces, ¿por qué aparece centrado si estamos aplicando el text-align únicamente al div?
- La propiedad text-align, como el resto de propiedades css, se hereda de padres a hijos, por lo que, todos los hijos del div que sean elementos en bloque heredarán esta propiedad.

Mismos elementos - Diferentes estilos

What we have now

Here's just the main heading elements in the lounge HTML.



Right now, the CSS says to color `<h1>` and `<h2>` element text aquamarine. So all `<h1>` and `<h2>` elements are that color, even in the elixirs `<div>`.

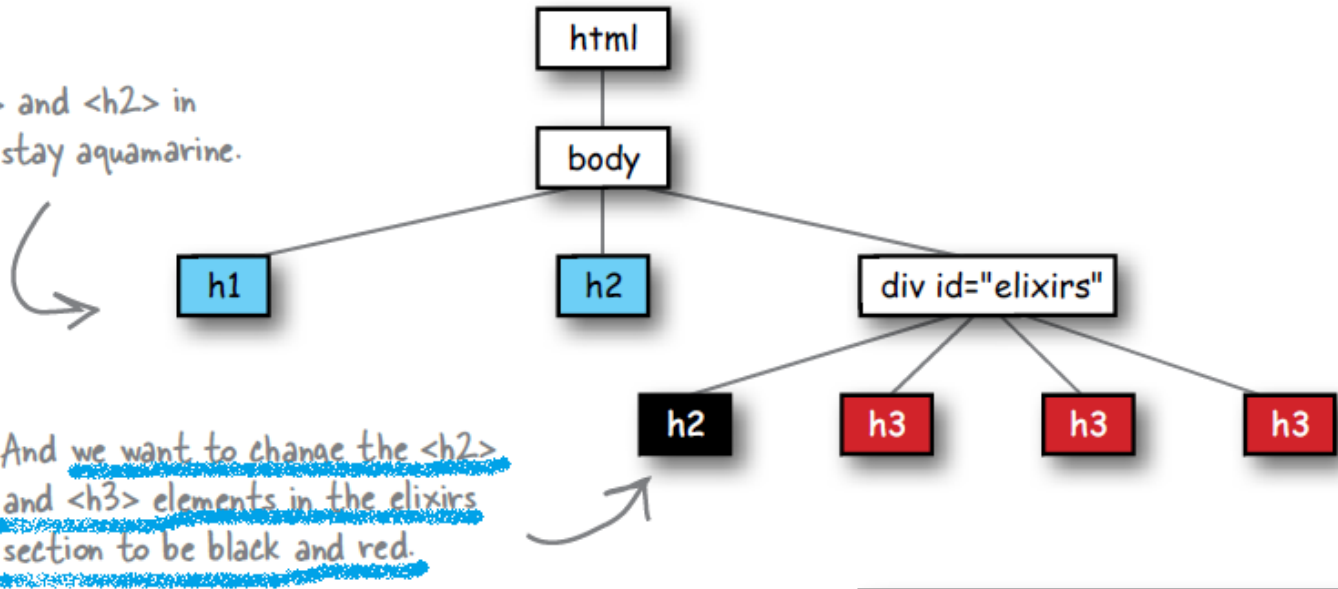
And here's the rule specifying the `<h1>` and `<h2>` color in the "lounge.css" file.

```
h1, h2 {  
    color: #007e7e;  
}
```

Mismos elementos - Diferentes estilos

What we want

We want the `<h1>` and `<h2>` in the main page to stay aquamarine.



And we want to change the `<h2>` and `<h3>` elements in the elixirs section to be black and red.

But if we change the existing rule for `<h2>`, we'll affect the font color of every `<h2>` in the main page. And if we add a new rule for `<h3>`, then any `<h3>`s that get added to the main page later will be red, which is not what we want. Now, we could use a class like Jim suggested, but we're going to give Frank's idea a try first...

```
h1, h2 {
    color: #007e7e;
}
```

?

Seleccionar descendientes

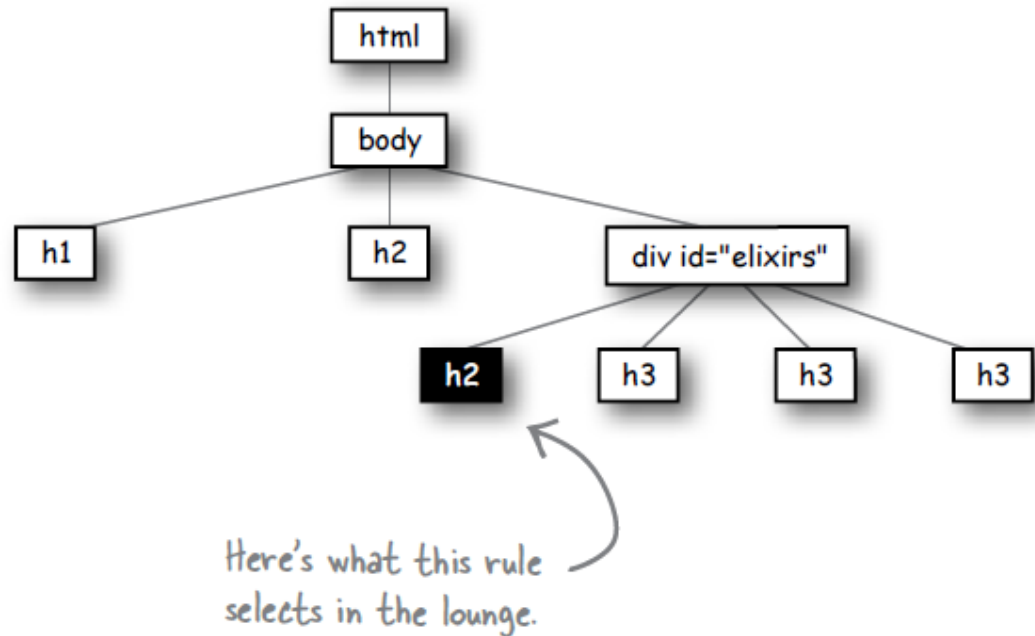
Leave a space between the parent name and the descendant name.

Here's the parent element.

And here's its descendant.

```
div h2 {  
    color: black;  
}
```

This rule says to select any <h2> that is a descendant of a <div>.



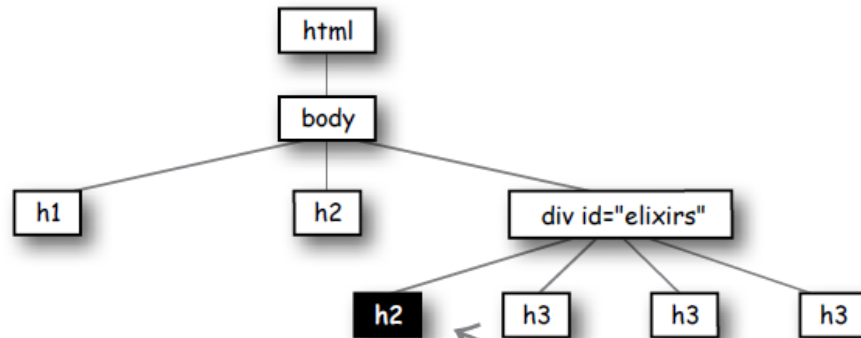
Sólo para un elemento

Now the parent element is the element with the id elixirs.

And here's its descendant.

```
#elixirs h2 {  
  color: black;  
}
```

This rule says to select any `<h2>` that is a descendant of an element with the id "elixirs".



This rule selects the same element. But it's more specific, so if we added another `<div>` with an `<h2>` to the page, that's okay because this rule selects only `<h2>`s in the elixirs `<div>`.

No hay preguntas tontas

- Descendiente por lo general significa hijo, nieto, bisnieto. Aquí, sólo estamos seleccionar los descendientes hijo, ¿verdad?
- ¿Hay manera de seleccionar a un hijo directo?
- ¿Y si necesito algo más complejo, como un `<h2>` que es el hijo de un `<blockquote>` que se encuentra en elixires?

Cambiando el color de las cabeceras

```
#elixirs h2 {  
  color: black;  
}
```

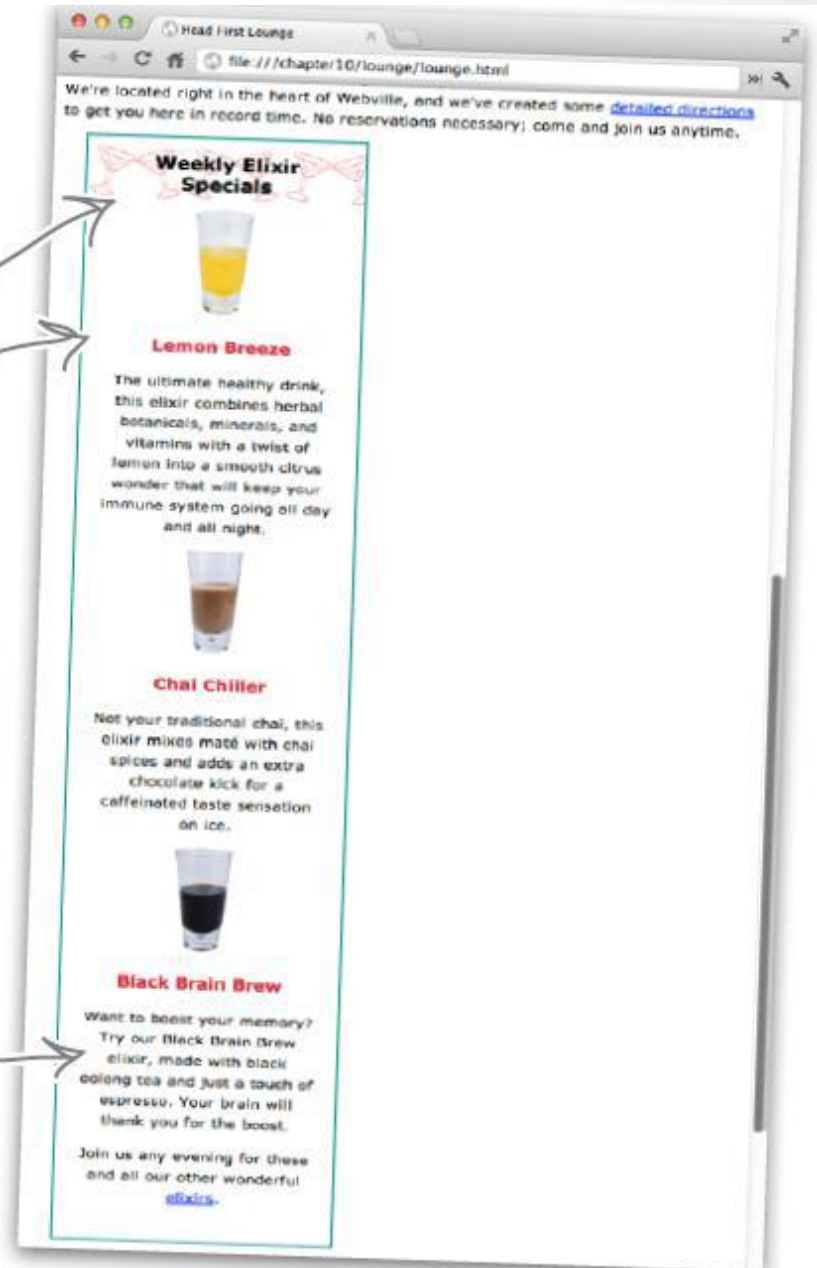
```
#elixirs h3 {  
  color: #d12c47;  
}
```

← Here, we're using the descendant selectors to target just the `<h2>` and `<h3>` elements in the elixirs `<div>`. We're setting `<h2>` to black, and `<h3>` to a red color, using a hex code.

Lo probamos

We've got black and red headings in the elixirs section, and we haven't affected the aquamarine color being used for `<h2>` headings in the main page.

Now all we need to do is fix the line height.



Corrigiendo el line-height

```
#elixirs {  
  line-height: 1em;  
}
```

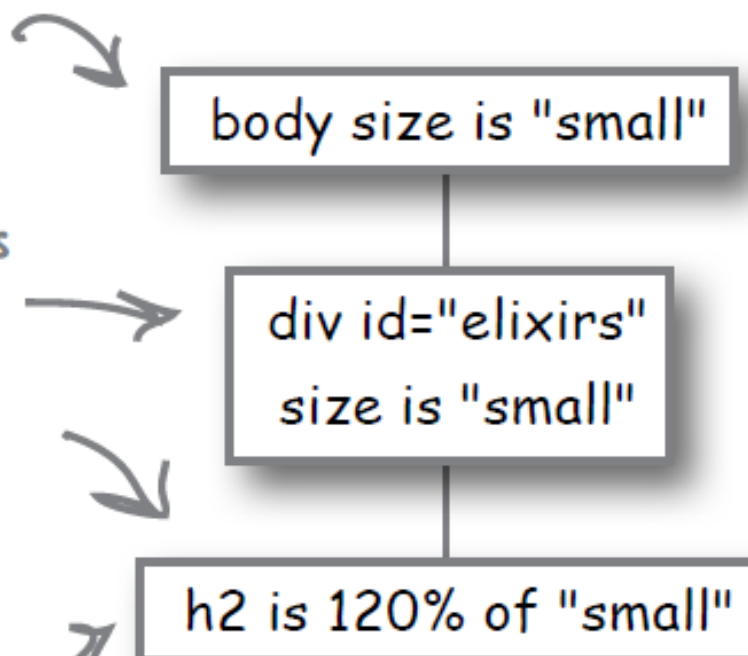
If you set the line-height property on the entire <div>, then it will be inherited by all elements in the <div>, including the headings. Notice that the line height in the heading is too small and the two lines are starting to run together.



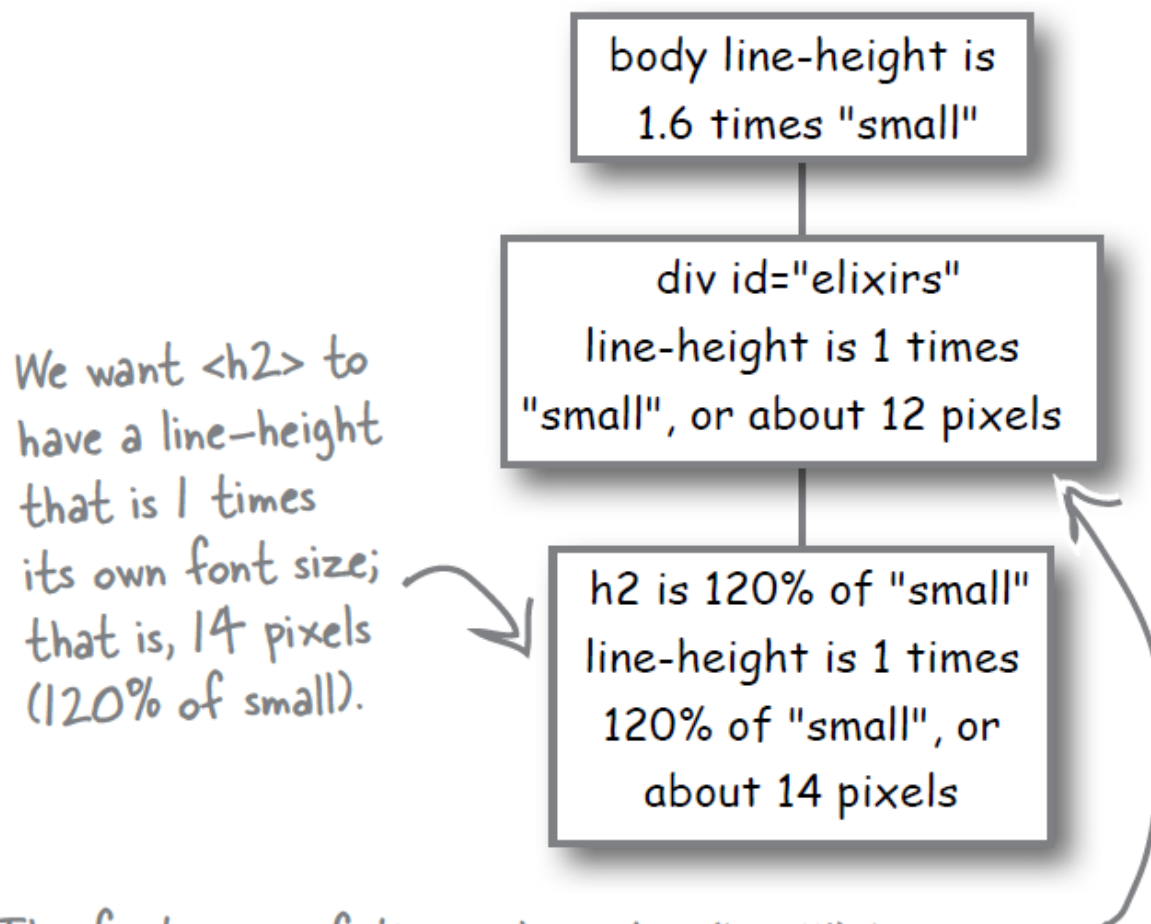
Herencia desde el body

Here are the font sizes of the elements. We set body to "small", so that's inherited by elixirs.

The line-height of <h2> is set to 1 times the font size of elixirs, which is "small", or about 12 pixels.



Herencia desde el body



The font-size of the p element is "small" (p inherits its font-size from the elixirs <div>), so it will have a line-height of 12 pixels, which is what we want.

Corrigiendo el line-height

```
#elixirs {  
    line-height: 1;  
}
```



Add a line-height of 1 to the elixirs <div> to change the line-height of each element in it.

Atajos

Here's the old-school way of specifying your padding.



```
padding-top: 0px;  
padding-right: 20px;  
padding-bottom: 30px;  
padding-left: 10px;
```



And here's the new and improved way to write them as a shorthand.



```
padding: 0px 20px 30px 10px;
```

top right bottom left

Atajos



```
margin-top:    0px;  
margin-right:  20px;  
margin-bottom: 30px;  
margin-left:   10px;
```



```
margin: 0px 20px 30px 10px;
```

top
right
bottom
left



Just like padding, you can use a shorthand to specify all your margin values with one property.



HTML is
for
structure

CSS is
for
presentation

Wash
Cat

Make It Stick



To remember the ordering of the padding and margin shorthand values, think of a clock labeled with top, right, bottom, and left. Then, always go in a clockwise direction: top to right to bottom to left.

margin: 0px 20px 30px 10px;

↑
top

↑
right

↑
bottom

↑
left

El atajo del atajo...



```
padding-top:    20px;  
padding-right:  20px;  
padding-bottom: 20px;  
padding-left:   20px;
```



```
padding: 20px;
```

This says that the padding should be 20 pixels on every side of the box.

If all your padding values are the same, then you can write it like this.

Aun hay más...



`margin-top: 0px;`
`margin-right: 20px;`
`margin-bottom: 0px;`
`margin-left: 20px;`

top and bottom
are the same.

right and left
are the same.

`margin: 0px 20px;`

If the top and bottom, as well as the right and left, margins are the same, then you can use a shorthand.

top and bottom

right and left

¿Y los bordes?



```
border-width: thin;  
border-style: solid;  
border-color: #007e7e;
```

Rewrite border properties as one property. These can be in any order you like.

```
border: thin solid #007e7e;
```

En diferente orden



These are all perfectly
valid border shorthands.

```
border: solid thin #007e7e;
```

```
border: #007e7e solid thin;
```

```
border: solid thin;
```

```
border: #007e7e solid;
```

```
border: solid;
```


Atajos para fondos



Like border, values can go in any order in this shorthand. There are also a few other values you can specify in the shorthand, like background-position.

```
background-color: white;  
background-image: url(images/cocktail.gif);  
background-repeat: repeat-x;
```



```
background: white url(images/cocktail.gif) repeat-x;
```


Atajos para fuentes...



Here are the properties that go into the font shorthand. Ordering matters here unless we say otherwise...

Finally, you need to add your font families. You only need to specify one font, but alternatives are highly encouraged.

You must specify font size.

font: font-style font-variant font-weight font-size/line-height font-family

These values are all optional. You can specify any combination of them, but they need to come before the font-size property.

The line-height property is optional. If you want to specify one, just put a / right after the font-size property and add your line height.

Use commas between your font-family names.

Más atajos para fuentes...



So let's give this a try. Here are the font properties for the lounge body:

```
font-size: small;  
font-family: Verdana, Helvetica, Arial, sans-serif;  
line-height: 1.6em;
```

Now let's map those to the shorthand:

We're not using any of these, but
that's okay—they're all optional.

`font: font-style font-variant font-weight font-size/line-height font-family`

And now let's write the shorthand:

```
font: small/1.6em Verdana, Helvetica, Arial, sans-serif;
```

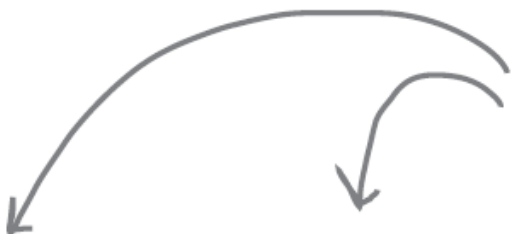
And here's the shorthand version.

El elemento ``

- Separa lógicamente los elementos *inline* como los separa un div para elementos de bloque
- **Ejemplo práctico:**
 - Queremos dar formato a los elementos:



Añadiendo



Each list item consists of a CD title, a comma, and then the music artist.

```
<ul>  
<li>Buddha Bar, Claude Challe</li>  
<li>When It Falls, Zero 7</li>  
<li>Earth 7, L.T.J. Bukem</li>  
<li>Le Roi Est Mort, Vive Le Roi!, Enigma</li>  
<li>Music for Airports, Brian Eno</li>  
</ul>
```

Añadiendo

Just add a opening tag along with the class attribute and a value of "cd".

Next, add a closing tag after the CD title.

Do the same for the artist. Nest it in a element, only this time put the in the "artist" class.

```
<ul>
<li><span class="cd">Buddha Bar</span>, <span class="artist">Claude Challe</span></li>
<li>When It Falls, Zero 7</li>
<li>Earth 7, L.T.J. Bukem</li>
<li>Le Roi Est Mort, Vive Le Roi!, Enigma</li>
<li>Music for Airports, Brian Eno</li>
</ul>
```

Aplicando estilos

We're going to add a rule for each of the new classes, `cd` and `artist`.

```
.cd {  
    font-style: italic;  
}
```

For CDs, we'll make the font style italic.

```
.artist {  
    font-weight: bold;  
}
```

And for artists we'll set the font-weight to bold.

Los enlaces tienen múltiples personalidades

Here's a link you've never clicked on before. This is called an "unvisited link" or just "link," and it's blue by default.

Join us any evening for these and all our other wonderful [elixirs](#).

Join us any evening for these and all our other wonderful [elixirs](#).

And here's a link you have clicked on before. We call these "visited links." Usually, visited links are displayed in a different color than unvisited links so that you can tell the difference. In most browsers, visited links are purple by default.

Join us any evening for these and all our other wonderful [elixirs](#).

Head First Lounge Elixirs

And if you hold your mouse over a link without clicking, this is called "hovering." On some browsers you'll see a tool tip that displays the text of the "title" attribute. And if you pay close attention, on some web pages, you'll see a different style as you hover.

Chai Chiller

Not your traditional chai, this elixir mixes maté with chai spices and adds an extra chocolate kick for a caffeinated taste sensation on ice.



Black Brain Brew

Want to boost your memory? Try our Black Brain Brew elixir, made with black oolong tea and just a touch of espresso. Your brain will thank you for the boost.

Join us any evening for these and all our other wonderful [elixirs](#).

What's playing at the Lounge

We're frequently asked about the music we play at the lounge, and no wonder, it's great stuff. Just for you, we keep a list here on the site, updated weekly. Enjoy.

Aplicar estilos a los enlaces

Notice we have the element `<a>`, followed by a `:` (colon), followed by the state we want to select. Make sure you don't have any spaces in these selectors (e.g., `a : link` won't work!)

↓
`a:link {`
 `color: green;`
`}`

This selector is applied to links when they are in an unvisited state.

`a:visited {`
 `color: red;`
`}`

← And this selector is applied to links when they are visited.

`a:hover {`
 `color: yellow;`
`}`

← And this selector is applied when you hover over a link.

Ejercicio

- Introduce los estilos anteriores en la hoja de estilos del lounge y observa lo que ocurre con los enlaces en los diferentes estados.

¿Cómo funcionan las pseudoclases?

Okay, big change here. We're using a descendant selector combined with a pseudo-class. The first selector says to select any unvisited `<a>` element that is nested in an element with the id "elixirs". So we're styling JUST the links inside elixirs.

```
#elixirs a:link {  
    color: #007e7e;  
}  
  
#elixirs a:visited {  
    color: #333333;  
}  
  
#elixirs a:hover {  
    background: #f88396;  
    color: #0d5353;  
}
```

On these two, we're setting the color. For unvisited links, a nice aquamarine...

...and for visited links we're using a dark gray.

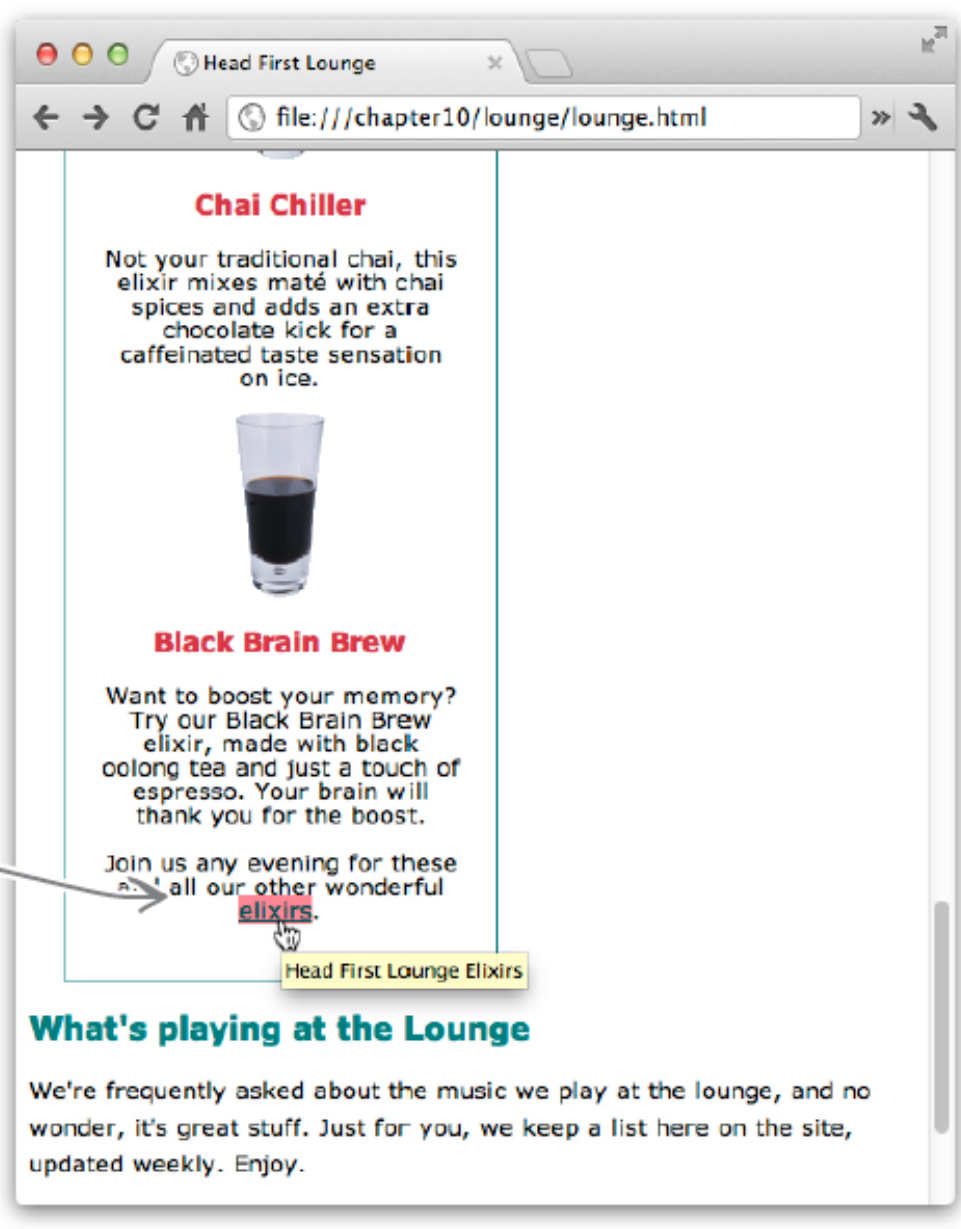
Now for the really interesting rule. When the user is hovering over the link, we're changing the background to red. This makes the link look highlighted when you pass the mouse over it. Give it a try!

Ejercicio

- Usa el nuevo selector de descendientes en los estilos de los enlaces que creaste en el ejercicio anterior dentro de la hoja de estilos del lounge

Lo probamos

Now we've got green unvisited links, gray visited links, and a very cool red highlight when you hover over the link.



Puntos importantes

- Usamos un **<div>** para agrupar elementos relacionados y juntarlos en secciones lógicas.
- Crear secciones lógicas puede ayudar a identificar las diferentes áreas de tu página web.
- Utilizamos **<div>** para crear secciones lógicas con el mismo estilo.
- Puedes usar los selectores de descendientes para seleccionar elementos anidados dentro de otros elementos.
- La propiedad **width** establece el ancho del área de contenido de un elemento.
- El **ancho total** de un elemento es el ancho del área de contenido más el ancho de cualquier elemento, padding, margen o borde que añadamos

Puntos importantes

- Puedes utilizar atajos en propiedades que tienen alguna relación entre sí.
- Las propiedades padding, margin, border, background y font se pueden especificar usando atajos.
- Igual que con <div>, podemos crear clases con **** para elementos inline
- El elemento <a> es un elemento con diferentes estados (**:link**, **:visited**, **:hover**)
- Podemos dar estilo a cada uno de esos estados, mediante pseudoclases.