

TRY **jQuery**

level





What is jQuery?

What you can do with jQuery



reveal interface elements

1.1 What is jQuery?

What you can do with jQuery

③ Payment

At Code School, there is no contract and you choose your commitment.

Go monthly and deactivate your account at any time, or choose our discounted yearly option.

If you don't love our service, we'll be happy to refund your last payment, or the remainder of your yearly subscription.

Get 3 months free when you enroll for a year!

PAY YEARLY

PAY WITH

\$25 PER MONTH

NAME ON CARD

CARD NUMBER

EXPIRATION DATE 1 - January 2013

SECURITY CODE

POSTAL CODE

YOUR SUMMARY

Code School Enrollment	\$25
YOUR TOTAL: \$25	

START SCHOOL

change content based on user actions

What you can do with jQuery

The image shows a user interface for selecting an enrollment plan. On the left, a section titled "1 Enroll:" with the sub-instruction "Select an Individual or Group plan." contains two large buttons: "INDIVIDUAL" and "MY TEAM". The "INDIVIDUAL" button is solid dark grey, while the "MY TEAM" button has a dashed border and a cursor arrow pointing to its top-right corner, indicating it is the active or selected option. To the right of the buttons, the word "Or" is centered above a vertical dashed-line separator. To the right of the separator, the "MY TEAM" section is displayed. Both sections feature bold text for price and plan type, followed by a smaller "OR PAY YEARLY AND SAVE!" message and a bulleted list of benefits.

INDIVIDUAL

\$25/MONTH

OR PAY YEARLY AND SAVE!

- UNLIMITED ACCESS TO ALL COURSES
- CODE TV SCREENCASTS
- VOTE ON UPCOMING COURSES
- NO CONTRACT OR COMMITMENT

Or

MY TEAM

\$25/MONTH/SEAT

OR PAY YEARLY AND SAVE!

- EACH MEMBER RECEIVES ACCESS TO ALL OF THE INDIVIDUAL BENEFITS

PLUS

- TRACK YOUR TEAM'S PROGRESS
- VISUAL DEVELOPMENT STATISTICS
- TEAM OVERSIGHT

toggle CSS classes to highlight an element

1.1 What is jQuery?

jQuery makes it easy to:



find

elements in an HTML document



change

HTML content



listen

to what a user does and react accordingly



animate

content on the page



talk

over the network to fetch new content

Document Object Model

A tree-like structure created by browsers so we can quickly find HTML Elements using JavaScript.

“DOM”

Loading HTML into the DOM

HTML document

```
<!DOCTYPE html>
<html>
<head>
  <title>jQuery Adventures</title>
</head>
<body>
  <h1>Where do you want to go?</h1>
  <p>Plan your next adventure.</p>
</body>
</html>
```

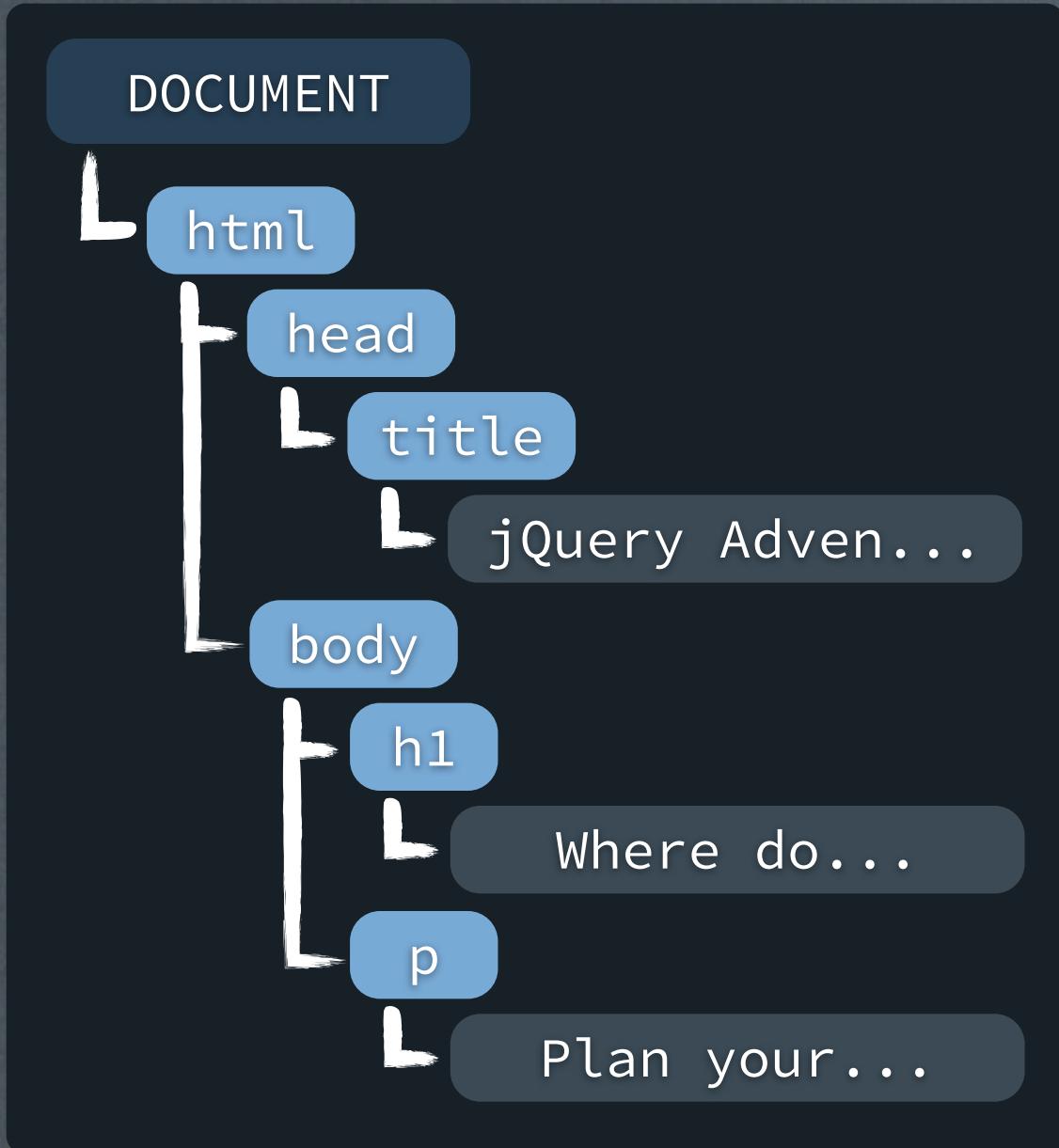


1.1 What is jQuery?

TRYjQuery

How do we search through the DOM?

The DOM



JavaScript

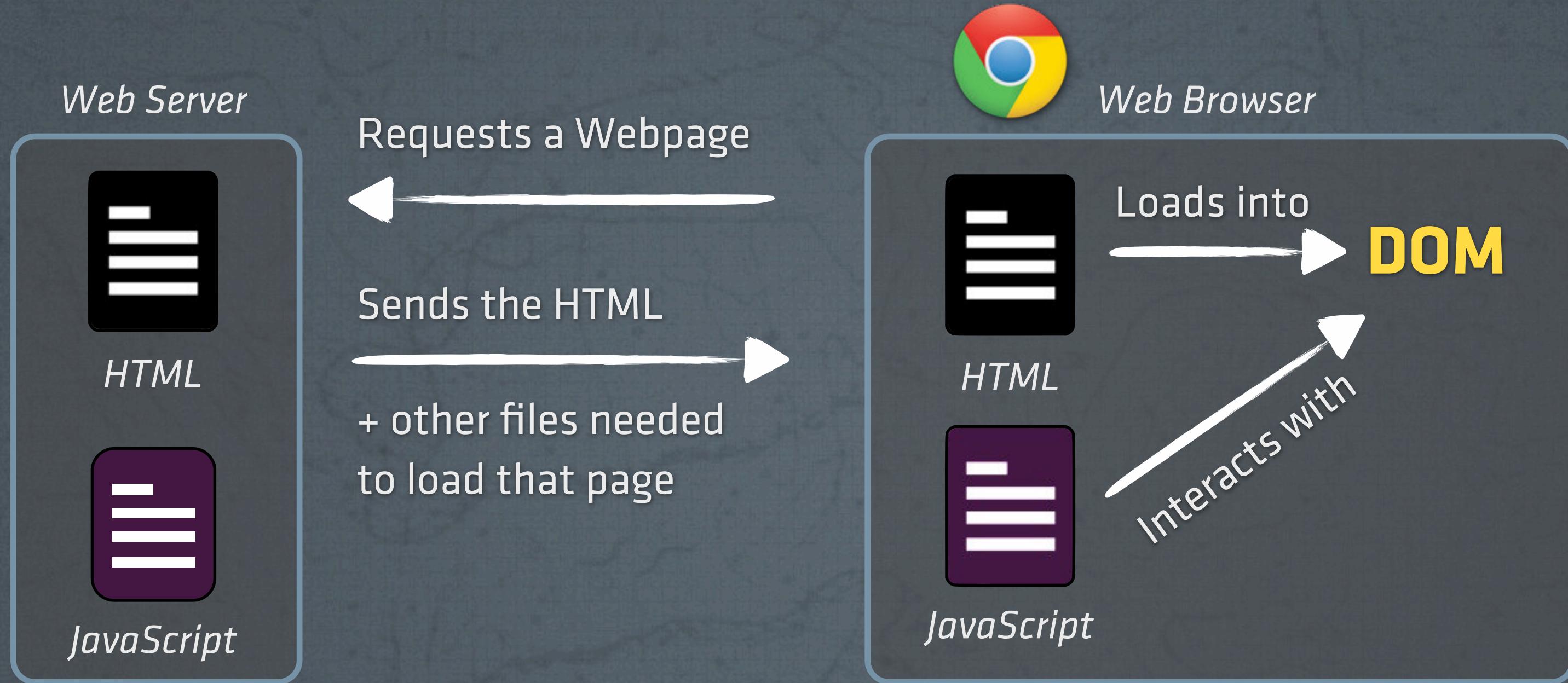
JavaScript gives developers a language to interact with the DOM.

node types: element text

1.1 What is jQuery?

TRYjQuery

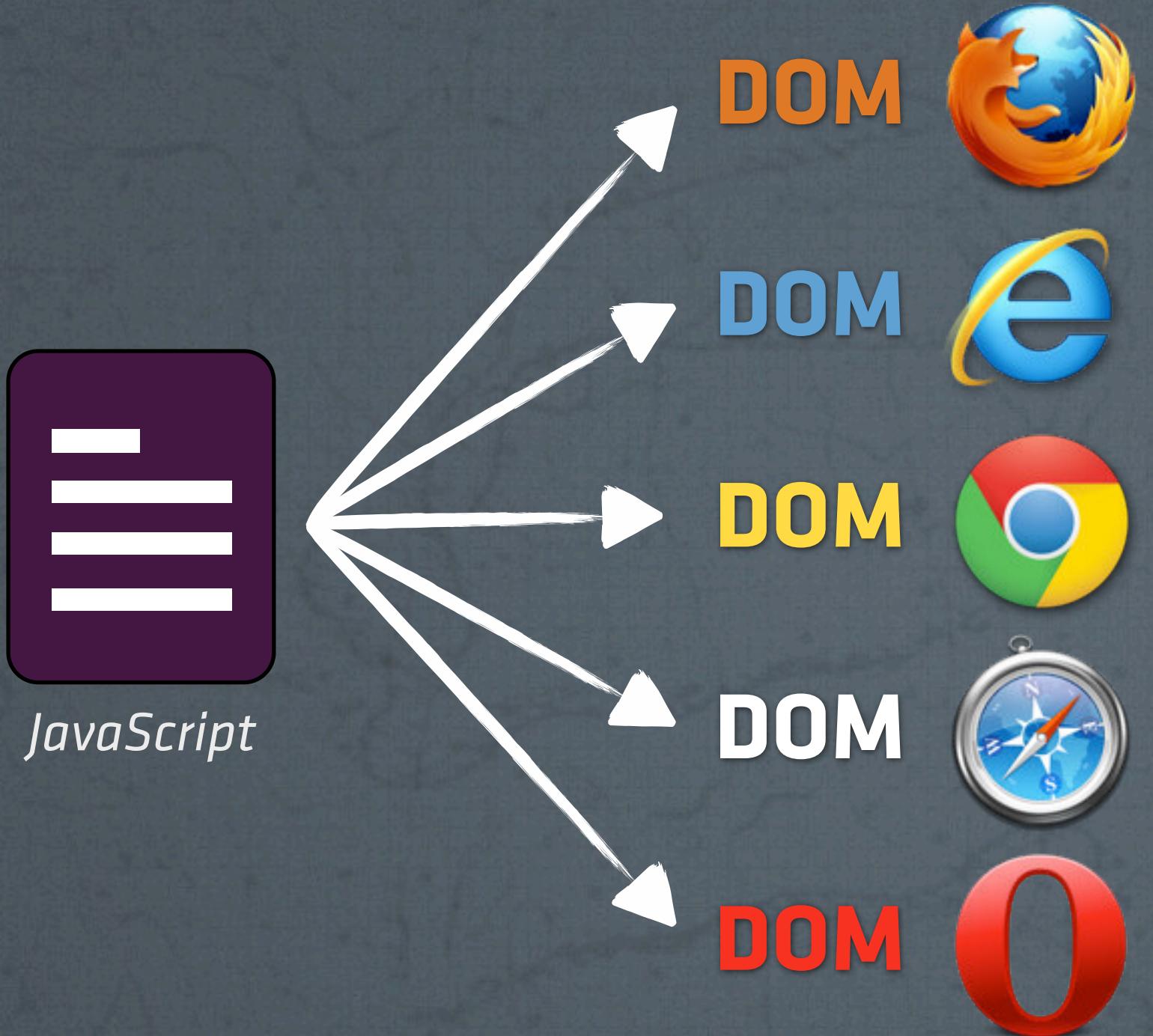
How do we find things using the DOM?



1.1 What is jQuery?

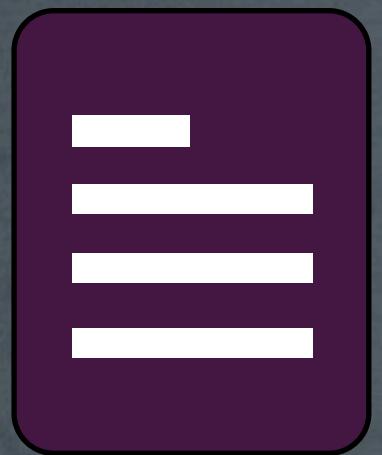
TRYjQuery

Of course, there's a catch



*each browser has a slightly
different DOM interface*

jQuery to the rescue!

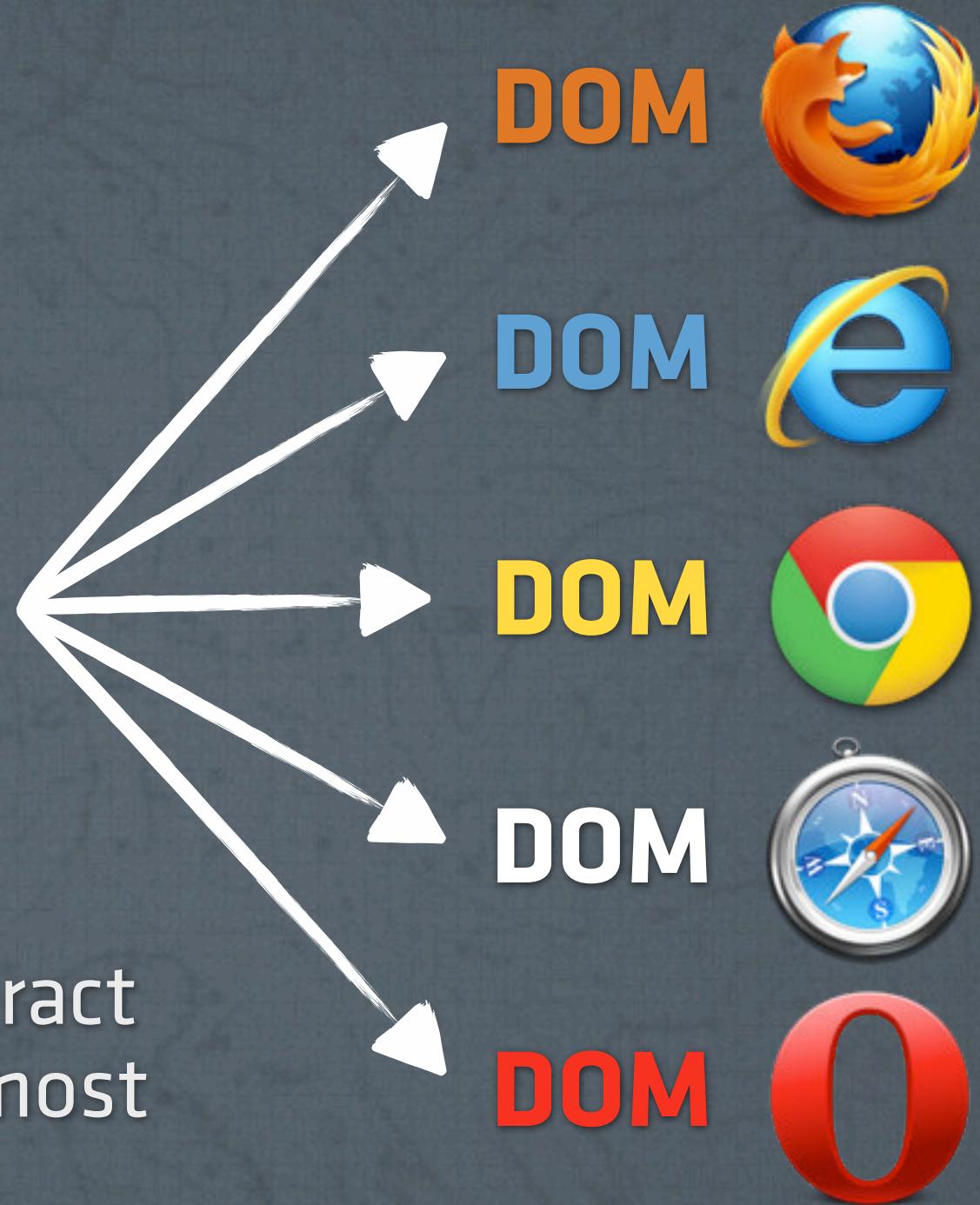


JavaScript



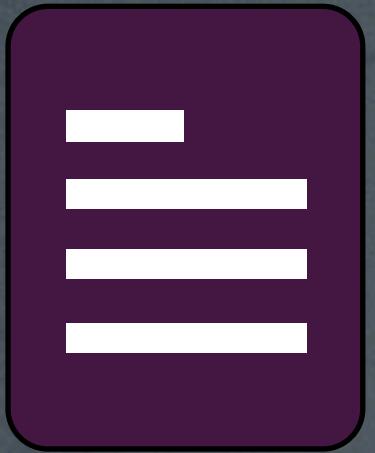
jQuery

If our JavaScript uses jQuery to interact with the DOM then it will work on most modern browsers.



1.1 What is jQuery?

Basic jQuery usage



JavaScript

this is the jQuery function

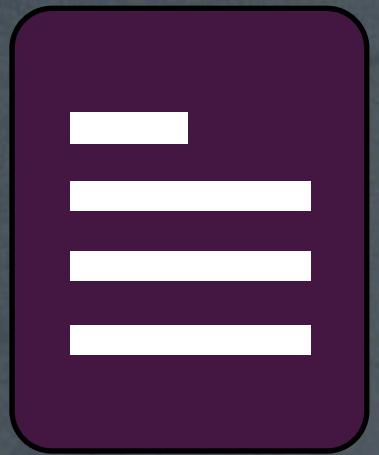


```
jQuery(<code>);
```

1.1 What is jQuery?

TRYjQuery

How jQuery Accesses The DOM



JavaScript

```
jQuery( document );
```

The DOM

But how can we search through the DOM?

1.1 What is jQuery?

TRYjQuery

We need to use CSS selectors

HTML document

```
<!DOCTYPE html>
<html>
<head>
  <title>jQuery Adventures</title>
</head>
<body>
  <h1>Where do you want to go?</h1>
  <p>Plan your next adventure.</p>
</body>
</html>
```

CSS selectors

```
h1 { font-size: 3em; }
p { color: blue; }
```

Using the jQuery function to find nodes

HTML document

```
<!DOCTYPE html>
<html>
<head>
  <title>jQuery Adventures</title>
</head>
<body>
  <h1>Where do you want to go?</h1>
  <p>Plan your next adventure.</p>
</body>
</html>
```

jQuery selectors

jQuery("h1");

jQuery("p");

\$("h1");

\$("p");

*short & sweet
syntax*

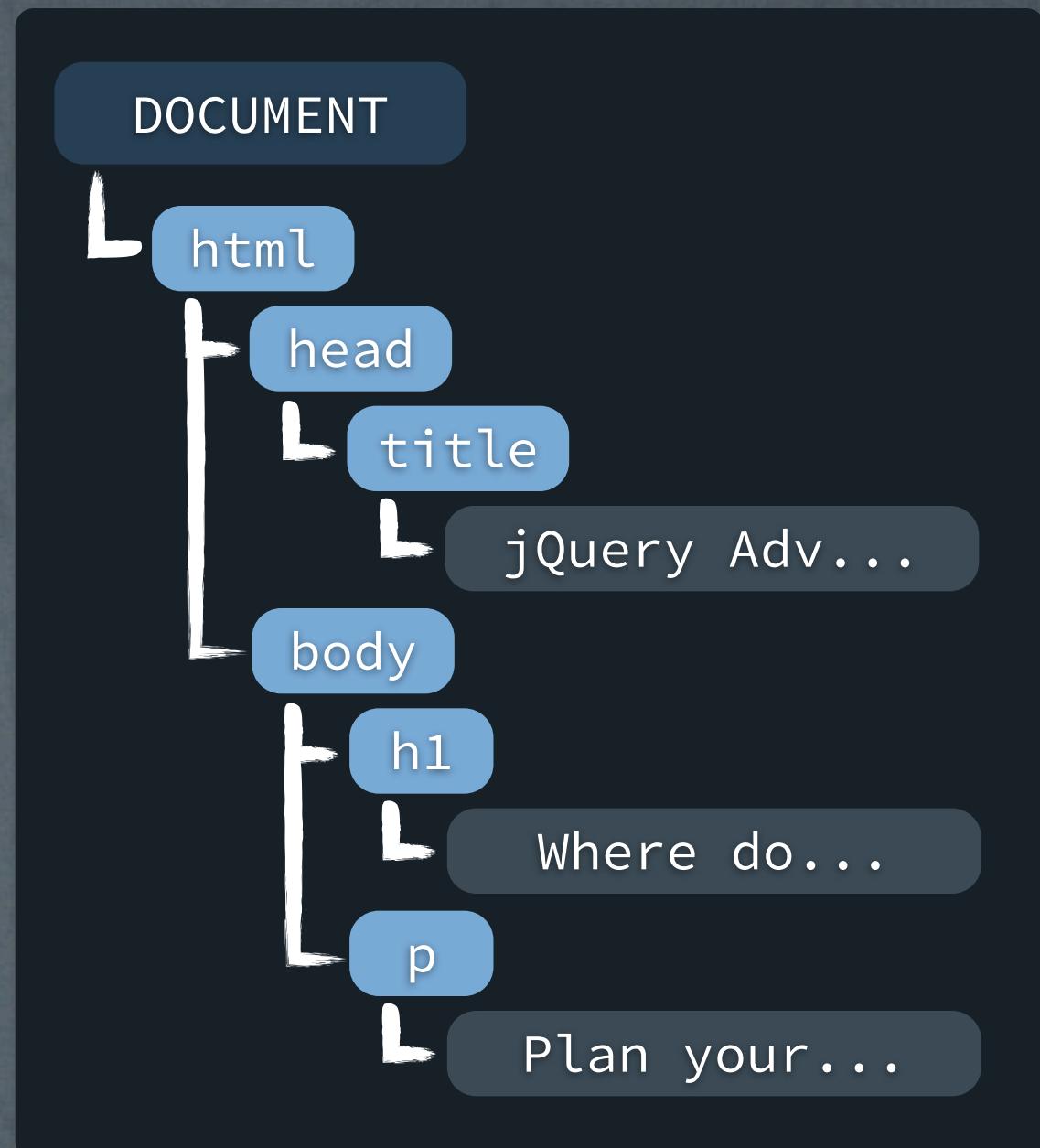
Selecting by HTML element name

HTML document

```
<!DOCTYPE html>
<html>
<head>
  <title>jQuery Adventures</title>
</head>
<body>
  <h1>Where do you want to go?</h1>
  <p>Plan your next adventure.</p>
</body>
</html>
```



DOM representation of the document



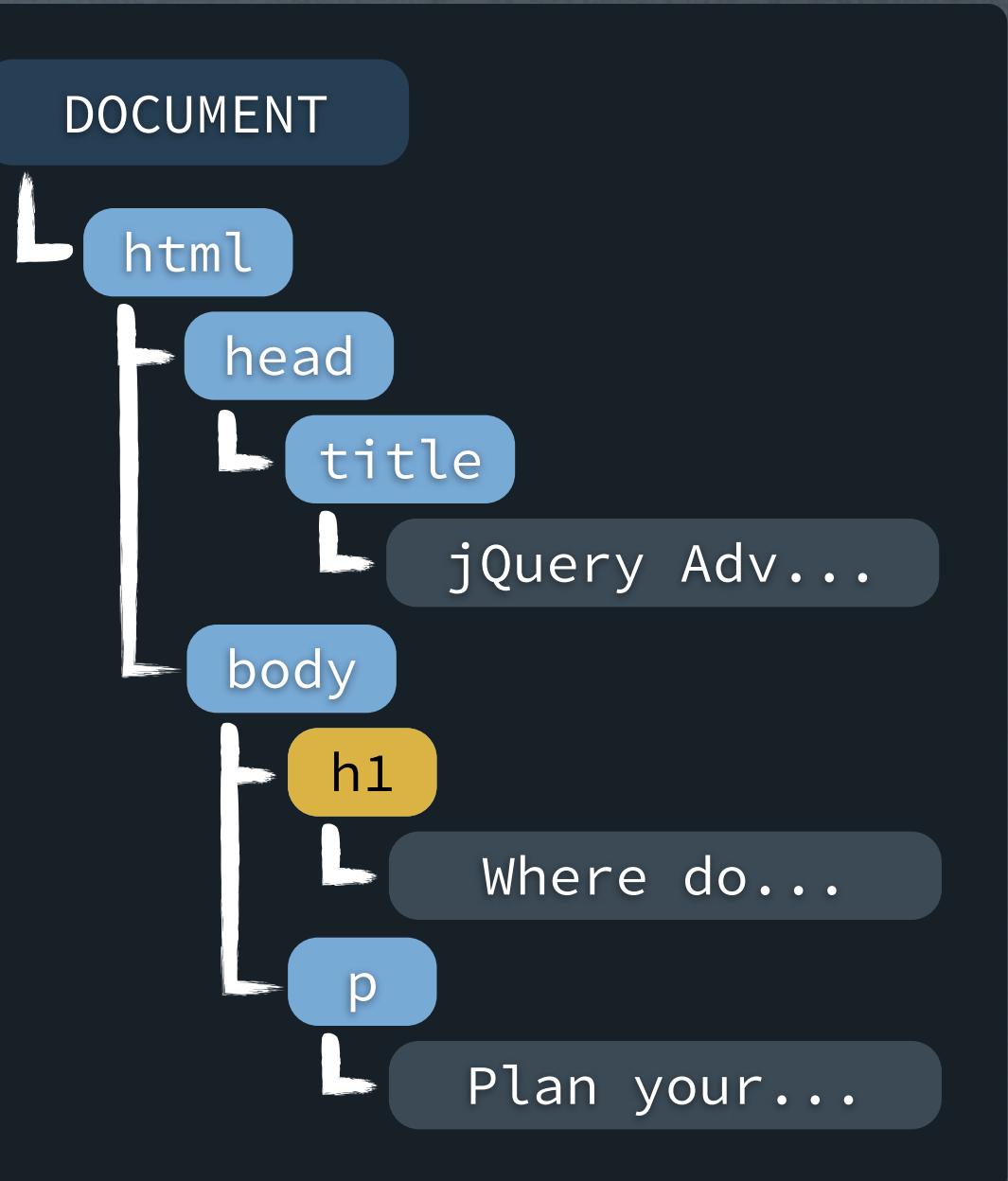
1.1 What is jQuery?

TRYjQuery

Selecting by HTML element name

DOM representation of the document

```
$( "h1" );
```



1.1 What is jQuery?

TRYjQuery

Fetching an element's text

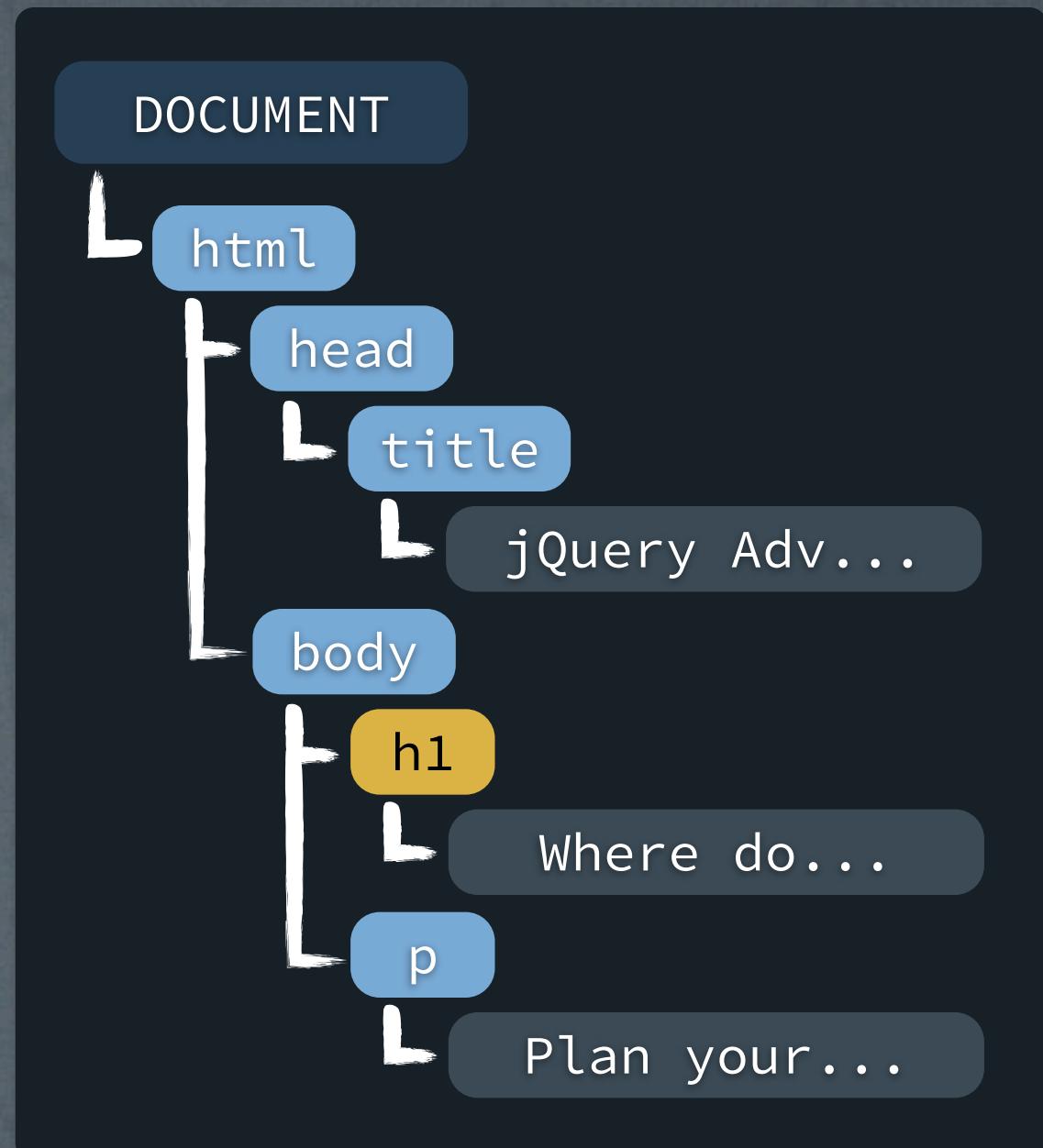
text() is a method offered by jQuery

```
$("h1").text();
```

↳ "Where do you want to go"



DOM representation of the document

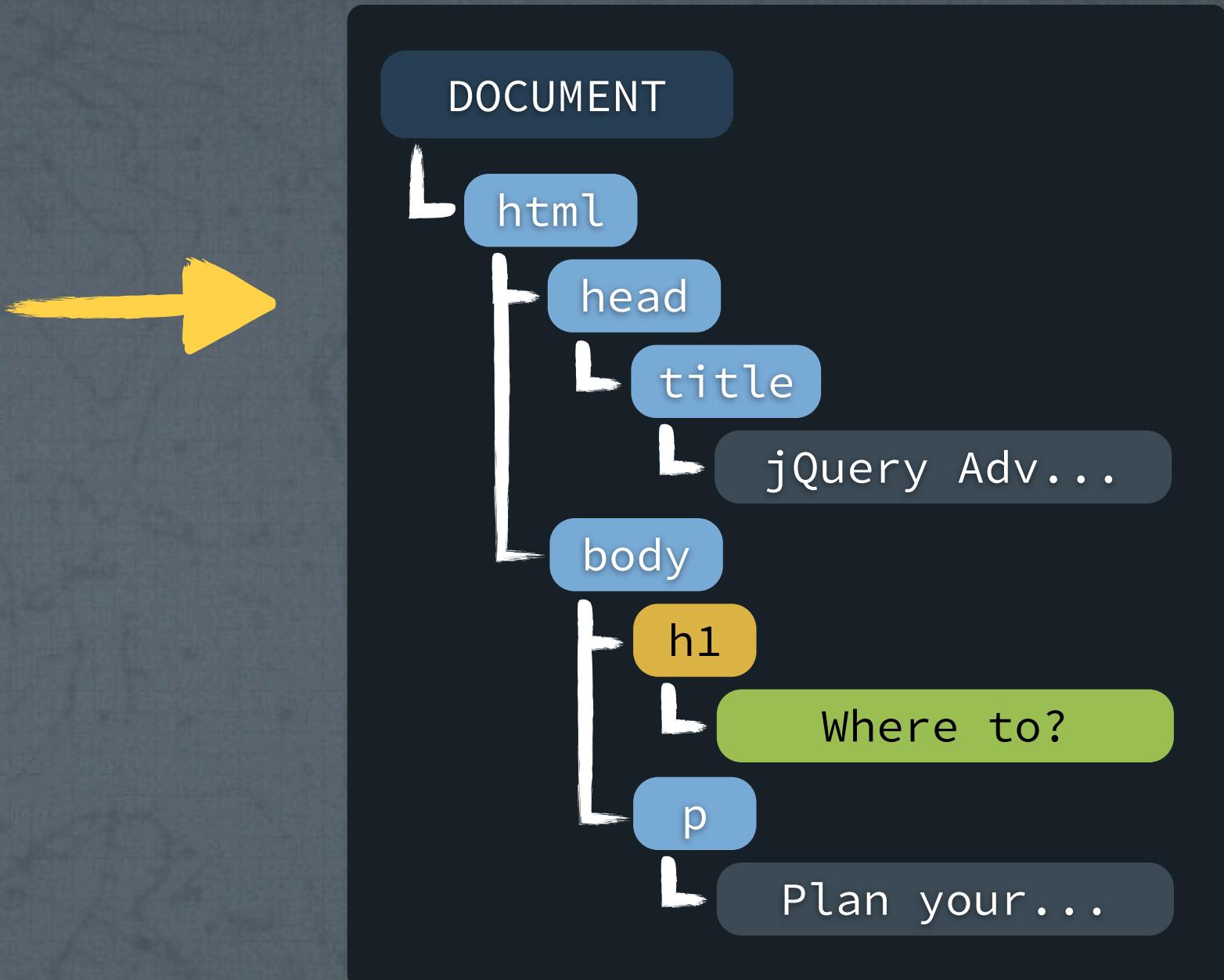


Modifying an element's text

text() also allows to modify the text node

```
$("h1").text("Where to?");
```

DOM representation of the document



JavaScript may execute before the DOM loads

HTML

0%

50%

100%

DOM



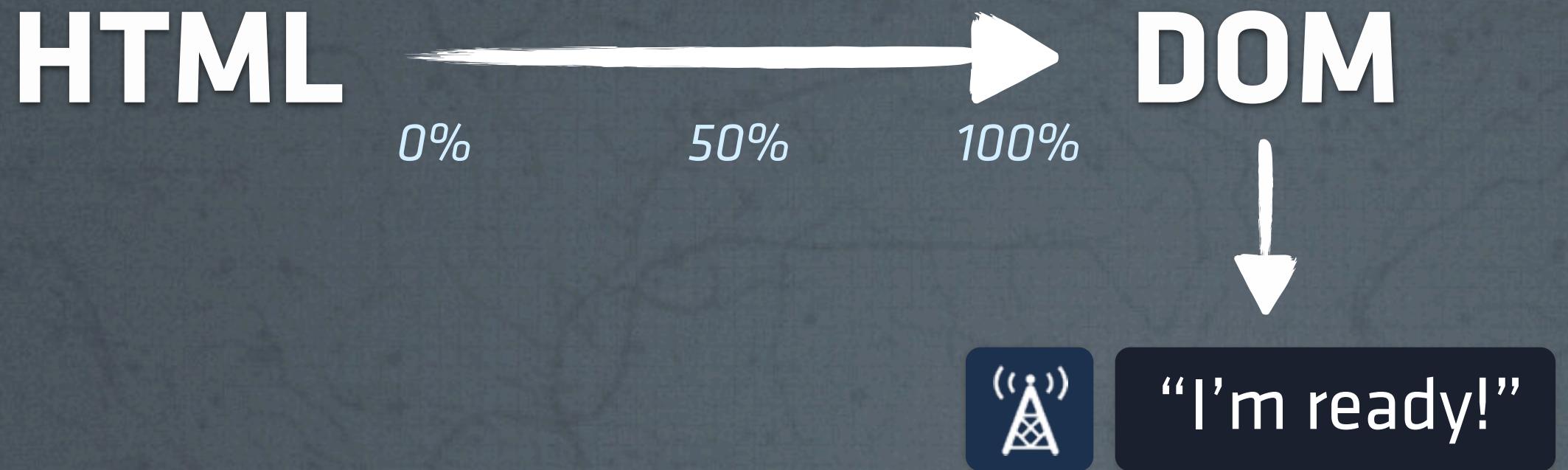
h1 wasn't in the DOM yet!

```
$( "h1" ).text( "Where to?" );
```

We need to make sure the DOM has finished loading the HTML content before we can reliably use jQuery.



The DOM ready event



How can we listen for this signal?



Listen for “I’m ready” then run <code>

Listening for document ready



```
jQuery(document).ready(function(){
  <code>
});
```

DOM



“I’m ready!”

Will only run this code once the DOM is “ready”

Our completed code



```
jQuery(document).ready(function(){
    $("h1").text("Where to?");
});
```



Using jQuery

Getting started

1

download jQuery

2

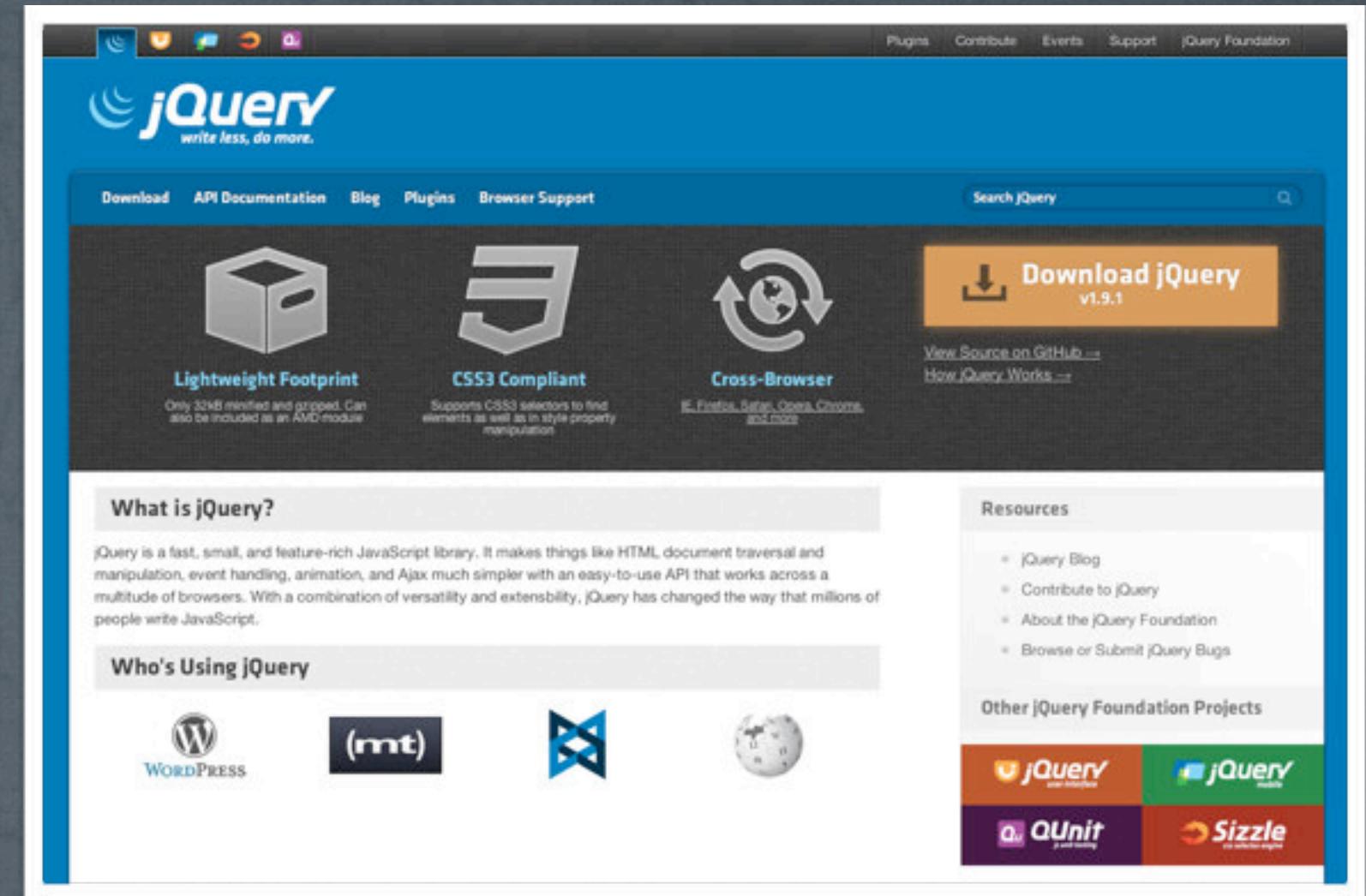
load it in your HTML document

```
<script src="jquery.min.js"></script>
```

3

start using it

```
<script src="application.js"></script>
```



Changing multiple elements at once

HTML document

```
<h1>Where do you want to go?</h1>
<h2>Travel Destinations</h2>
<p>Plan your next adventure.</p>
<ul id="destinations">
  <li>Rome</li>
  <li>Paris</li>
  <li class='promo'>Rio</li>
</ul>
```

How do we change the text of every `` in this page?



find them

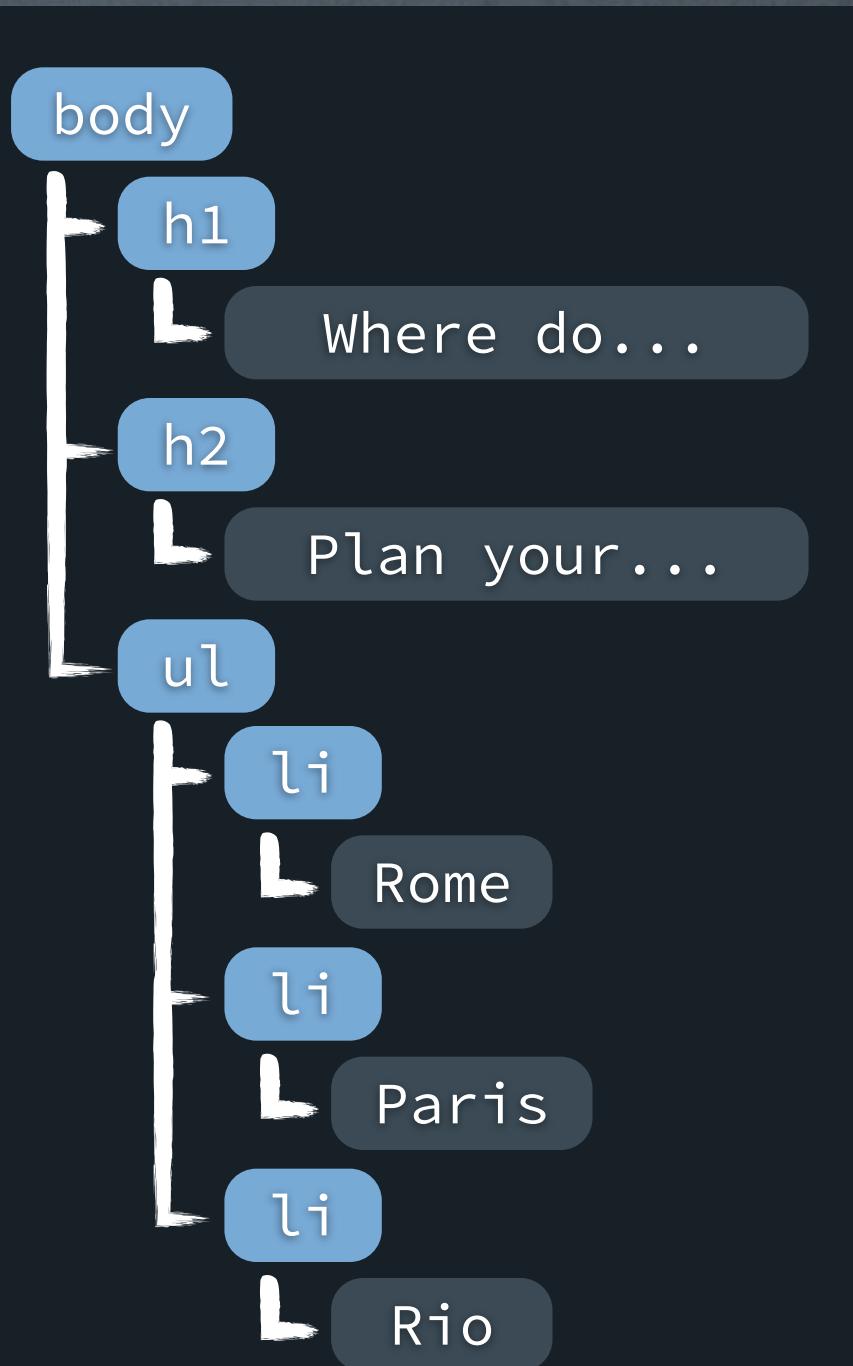


modify their text

Load HTML into the DOM

HTML document

```
<h1>Where do you want to go?</h1>
<h2>Travel Destinations</h2>
<p>Plan your next adventure.</p>
<ul id="destinations">
  <li>Rome</li>
  <li>Paris</li>
  <li class='promo'>Rio</li>
</ul>
```

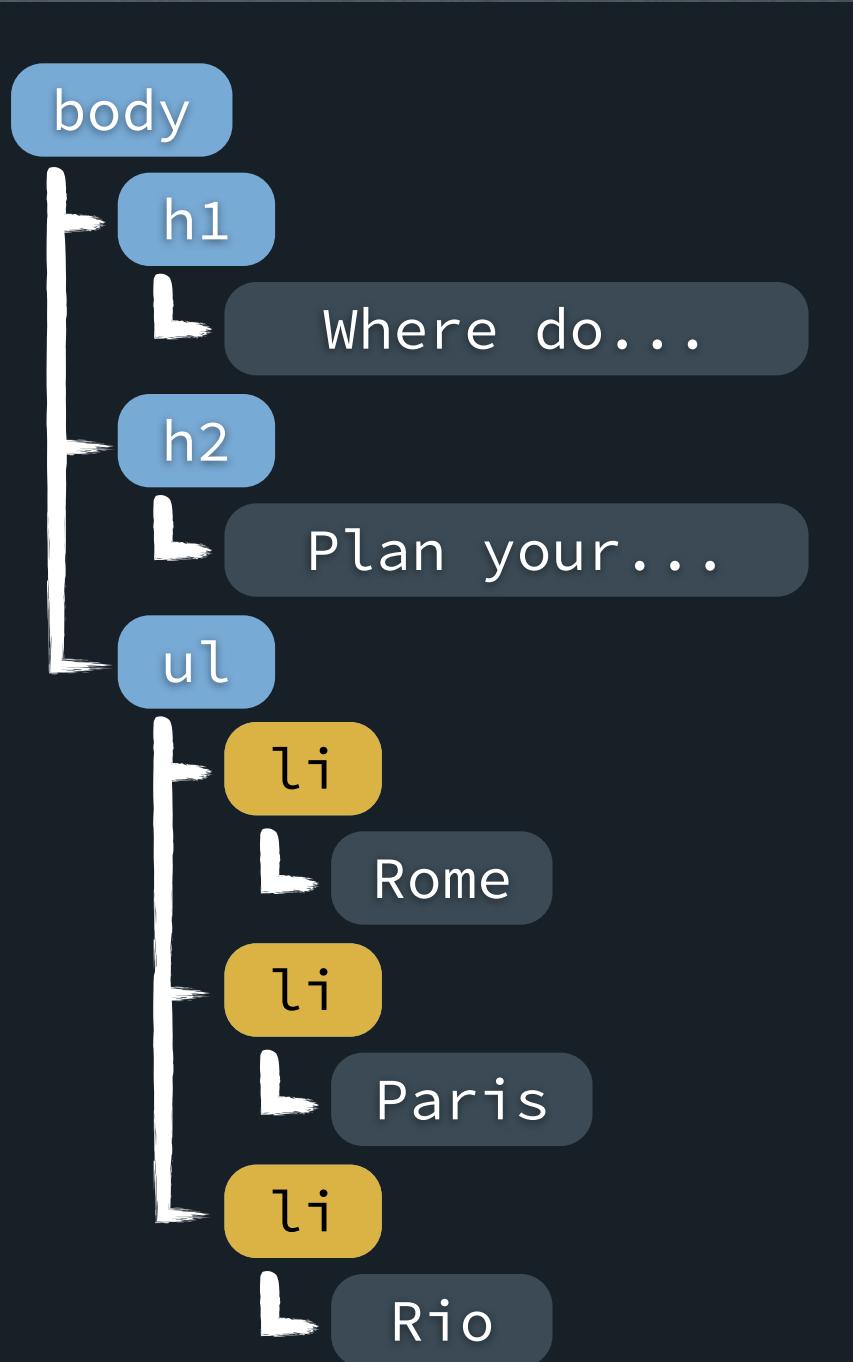


Selecting multiple elements

HTML document

```
<h1>Where do you want to go?</h1>
<h2>Travel Destinations</h2>
<p>Plan your next adventure.</p>
<ul id="destinations">
  <li>Rome</li>
  <li>Paris</li>
  <li class='promo'>Rio</li>
</ul>
```

```
$( "li" );
```

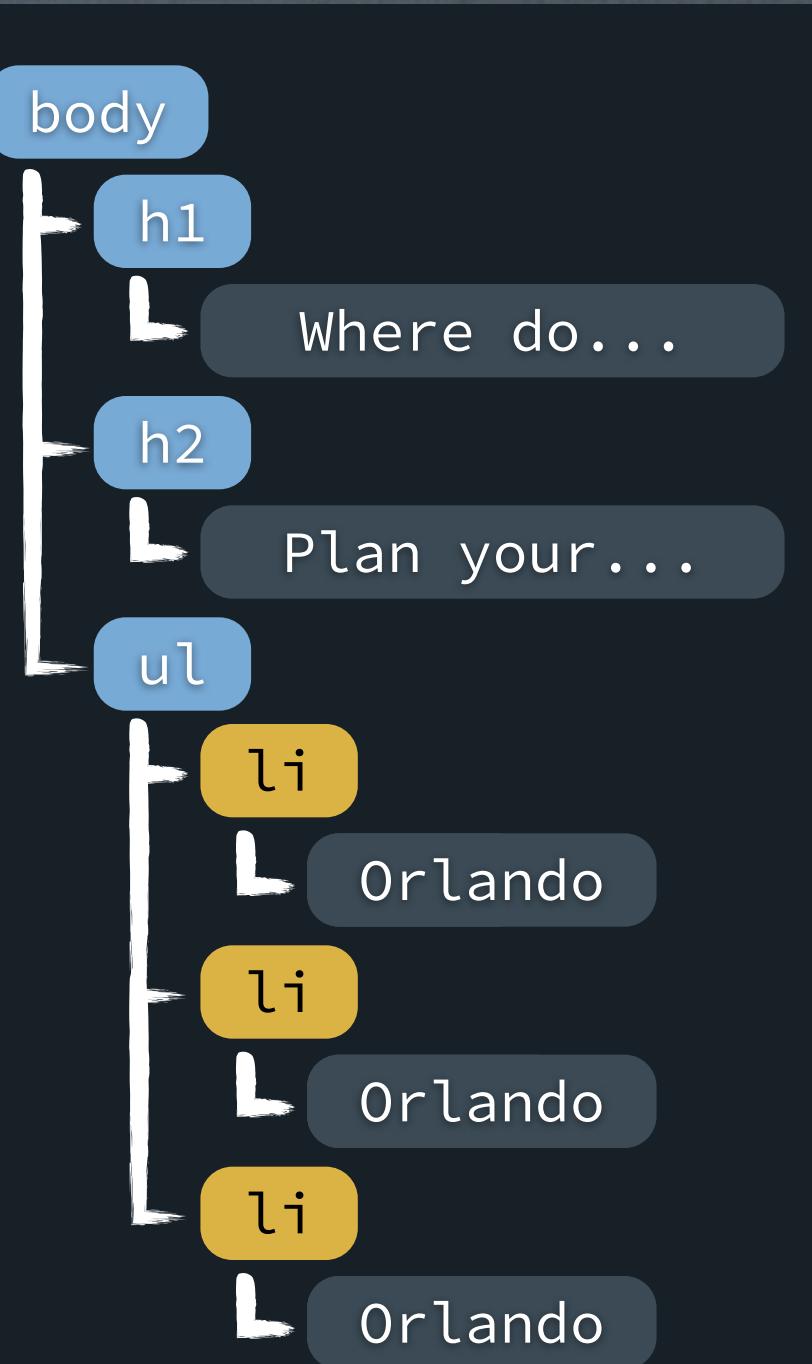


Modifying each of their text nodes

HTML document

```
<h1>Where do you want to go?</h1>
<h2>Travel Destinations</h2>
<p>Plan your next adventure.</p>
<ul id="destinations">
  <li>Rome</li>
  <li>Paris</li>
  <li class='promo'>Rio</li>
</ul>
```

```
$( "li" ).text("Orlando");
```



We can find elements by ID or Class

CSS

```
p { ... }
```

```
#container { ... }
```

```
.articles { ... }
```

jQuery

```
$( "p" );
```

```
$( "#container" );
```

```
$( ".articles" );
```



Changing multiple elements at once

HTML document

```
<h1>Where do you want to go?</h1>
<h2>Travel Destinations</h2>
<p>Plan your next adventure.</p>
<ul id="destinations">
  <li>Rome</li>
  <li>Paris</li>
  <li class='promo'>Rio</li>
</ul>
```

How do we specifically select the `` that has a “destinations” ID?



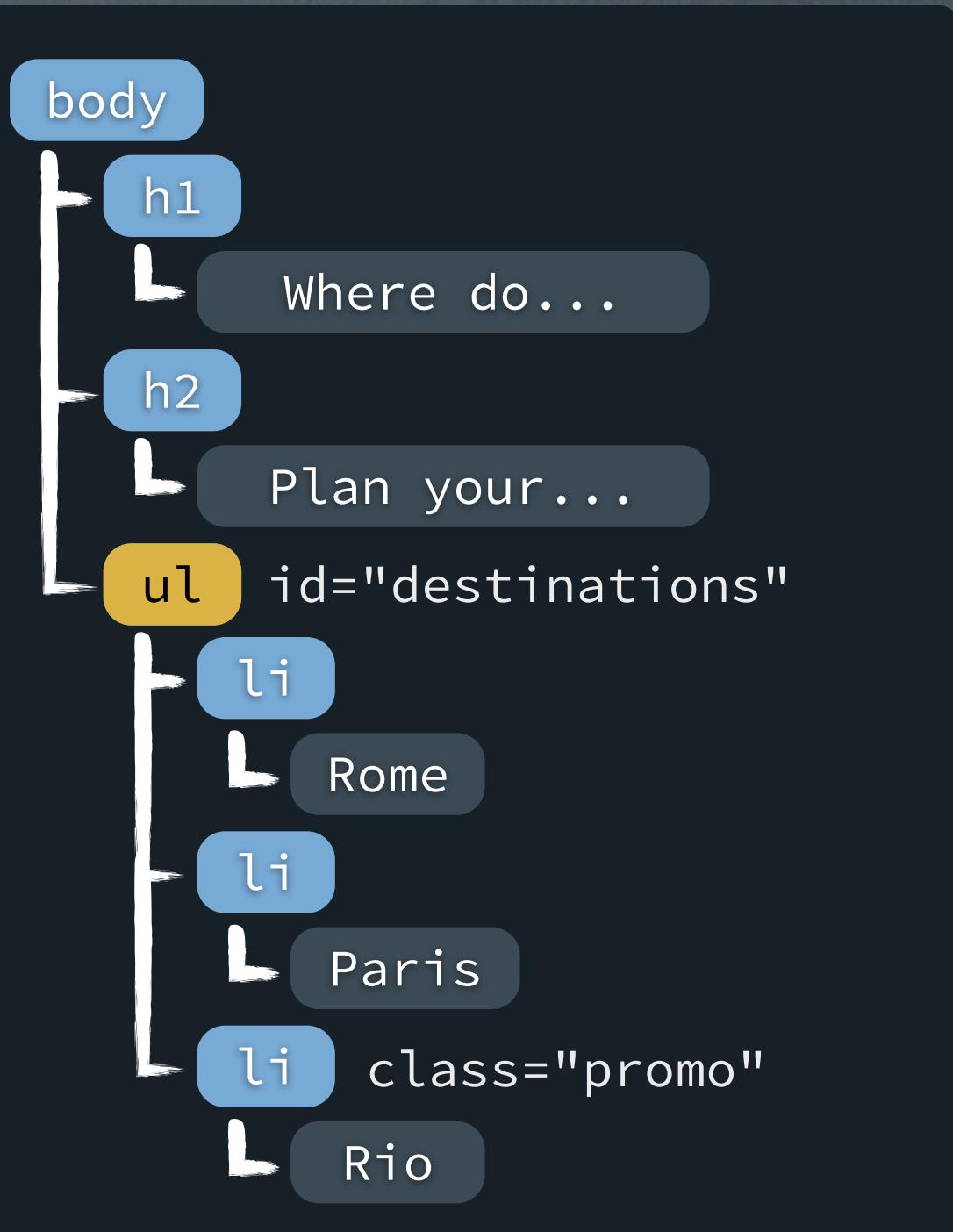
find it using the ID

Selecting by unique ID

HTML document

```
<h1>Where do you want to go?</h1>
<h2>Travel Destinations</h2>
<p>Plan your next adventure.</p>
<ul id="destinations">
  <li>Rome</li>
  <li>Paris</li>
  <li class='promo'>Rio</li>
</ul>
```

```
$("#destinations");
```



1.2 Using jQuery

Changing multiple elements at once

HTML document

```
<h1>Where do you want to go?</h1>
<h2>Travel Destinations</h2>
<p>Plan your next adventure.</p>
<ul id="destinations">
  <li>Rome</li>
  <li>Paris</li>
  <li class='promo'>Rio</li>
</ul>
```

How can we select just the `` that has a “promo” class attribute?



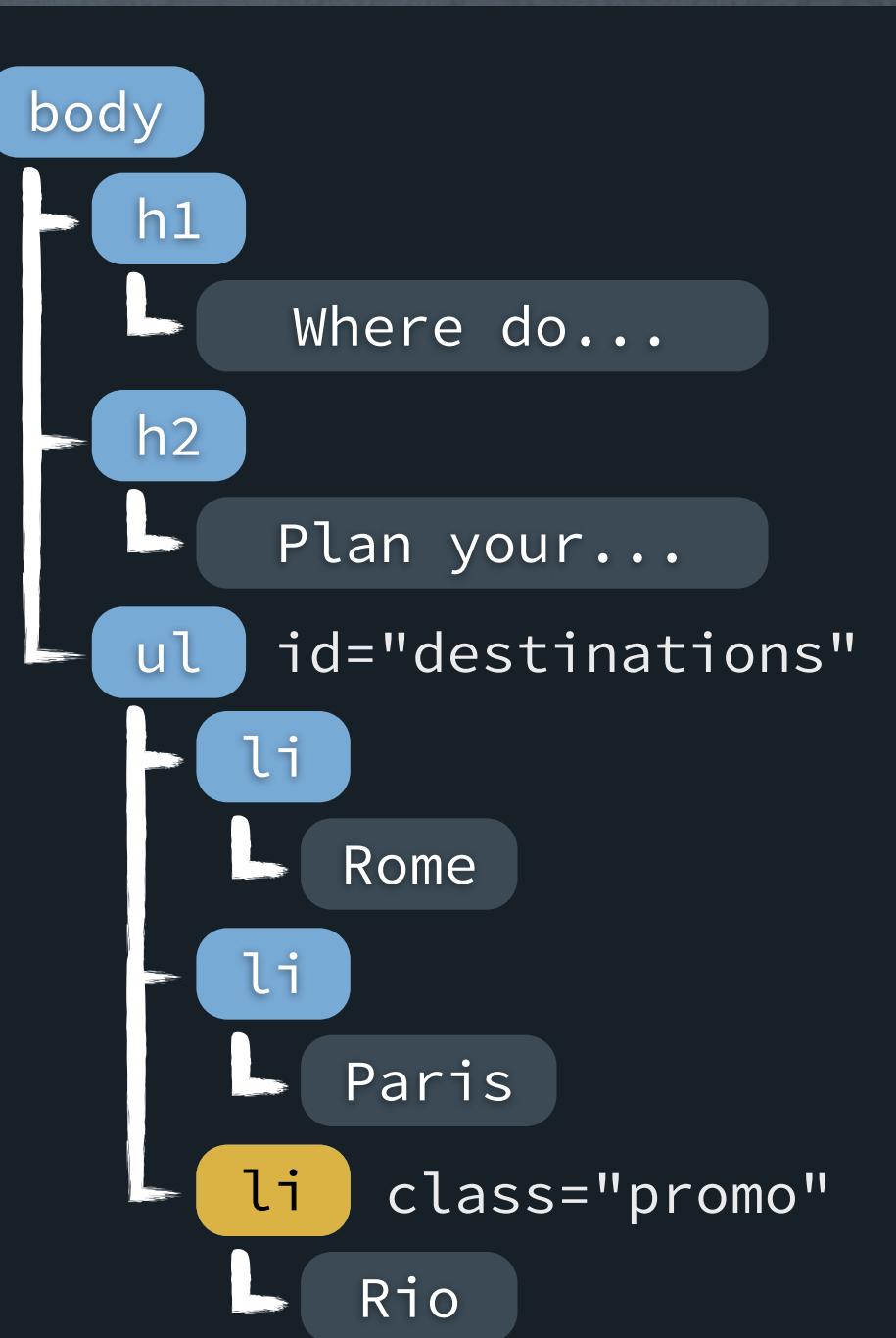
find it using the class

Selecting by Class Name

HTML document

```
<h1>Where do you want to go?</h1>
<h2>Travel Destinations</h2>
<p>Plan your next adventure.</p>
<ul id="destinations">
  <li>Rome</li>
  <li>Paris</li>
  <li class='promo'>Rio</li>
</ul>
```

```
$(".promo");
```



level 2



Searching the DOM

Selecting descendants

HTML document

```
<h1>Where do you want to go?</h1>
<h2>Travel Destinations</h2>
<p>Plan your next adventure.</p>
<ul id="destinations">
  <li>Rome</li>
  <li>Paris</li>
  <li class='promo'>Rio</li>
</ul>
```

How do we find the `` elements that are inside of the `` with a “destinations” ID?



descendant selector

Using the descendant selector

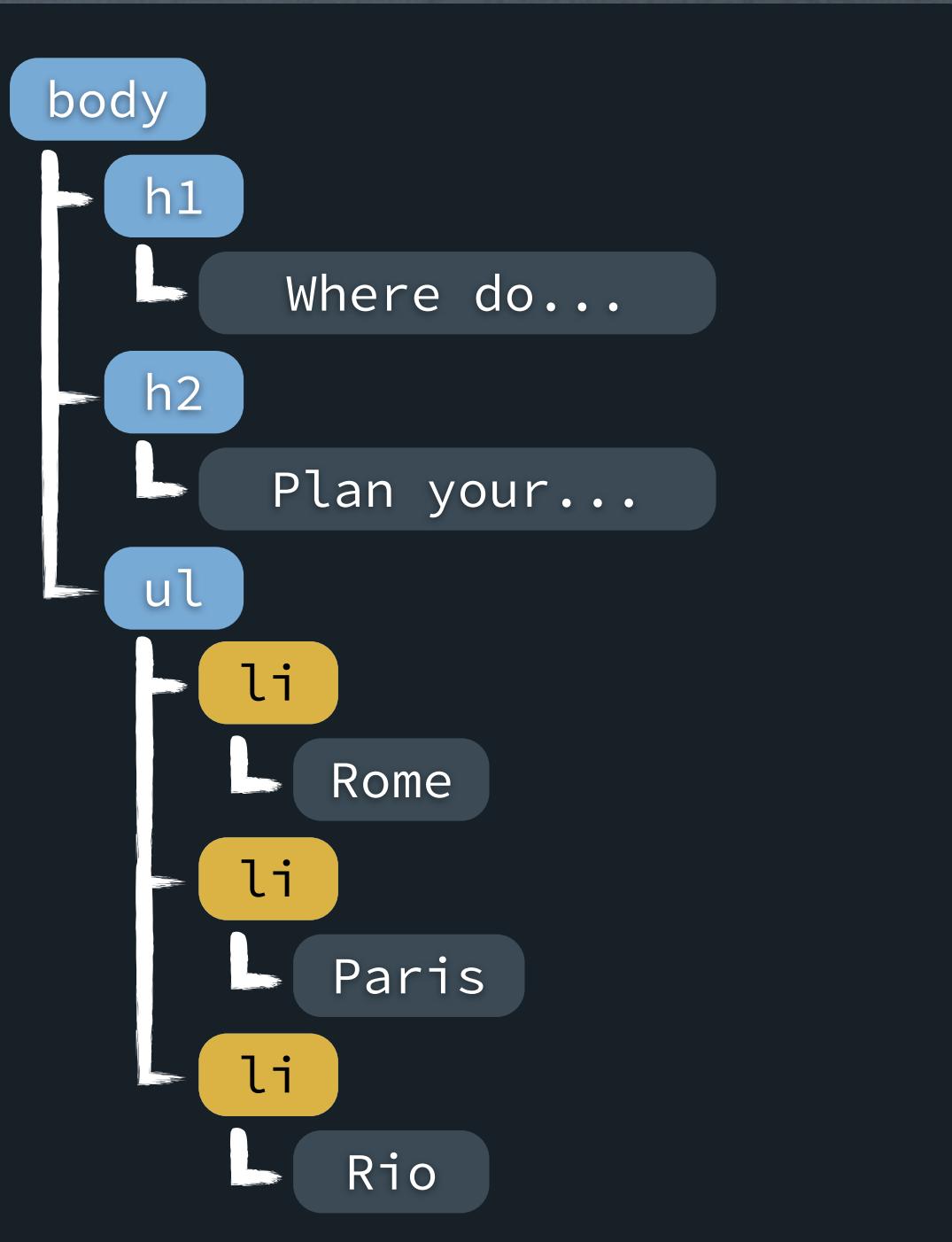
HTML document

```
<h1>Where do you want to go?</h1>
<h2>Travel Destinations</h2>
<p>Plan your next adventure.</p>
<ul id="destinations">
  <li>Rome</li>
  <li>Paris</li>
  <li class='promo'>Rio</li>
</ul>
```

the space matters

```
$("#destinations li");
```

parent *descendant*



2.1 Searching the DOM

Selecting direct children

HTML document

```
<h1>Where do you want to go?</h1>
<h2>Travel Destinations</h2>
<p>Plan your next adventure.</p>
<ul id="destinations">
  <li>Rome</li>
  <li>
    <ul id="france">
      <li>Paris</li>
    </ul>
  </li>
  <li class='promo'>Rio</li>
</ul>
```

How do we find only the `` elements that are children of the “destinations” ``?



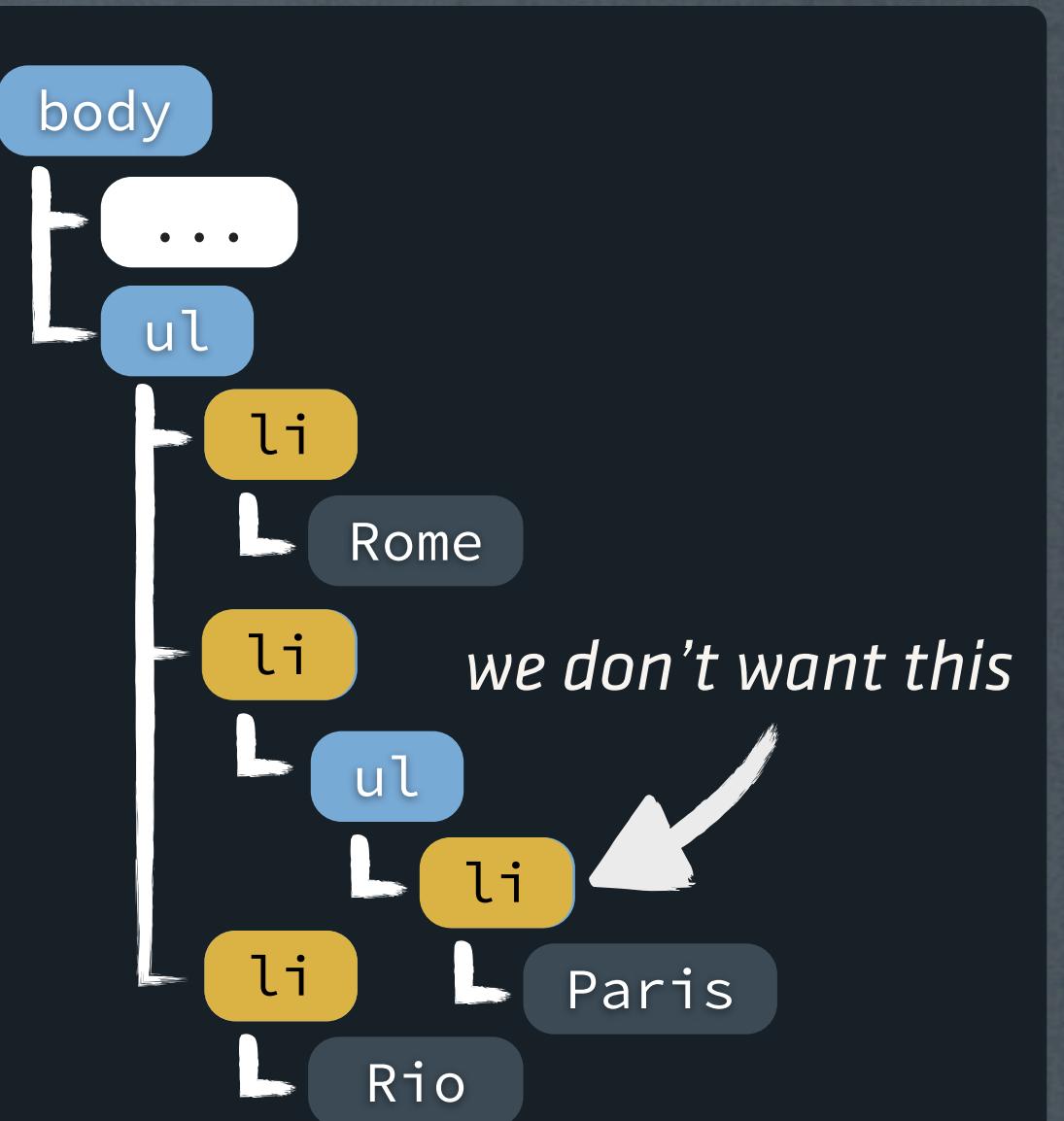
descendant selector?

Selecting direct children

HTML document

```
<h1>Where do you want to go?</h1>
<h2>Travel Destinations</h2>
<p>Plan your next adventure.</p>
<ul id="destinations">
  <li>Rome</li>
  <li>
    <ul id="france">
      <li>Paris</li>
    </ul>
  </li>
  <li class='promo'>Rio</li>
</ul>
```

```
$("#destinations li");
```



2.1 Searching the DOM

Selecting only direct children

HTML document

```
<h1>Where do you want to go?</h1>
<h2>Travel Destinations</h2>
<p>Plan your next adventure.</p>
<ul id="destinations">
  <li>Rome</li>
  <li>
    <ul id="france">
      <li>Paris</li>
    </ul>
  </li>
  <li class='promo'>Rio</li>
</div>
```

How do we find only the `` elements that are **direct** children of the “destinations” `` then?



child selector