HTML, DOM, JAVA OBJECT MODEL – A JAVASCRIPT LOOK

1

The browser receives a web page

```
<DOCTYPE html>
<html>
  <head>
    <title>Constructive &amp;amp; Co</title>
    <link rel=“stylesheet” href=“c01.css” />
  </head>
  <body>
    <h1>Constructive &amp;amp; Co</h1>
    <p>For all orders and enquiries,
    please call <em>555-3344</em></p>
  </body>
</html>
```

1

The browser receives a web page

2

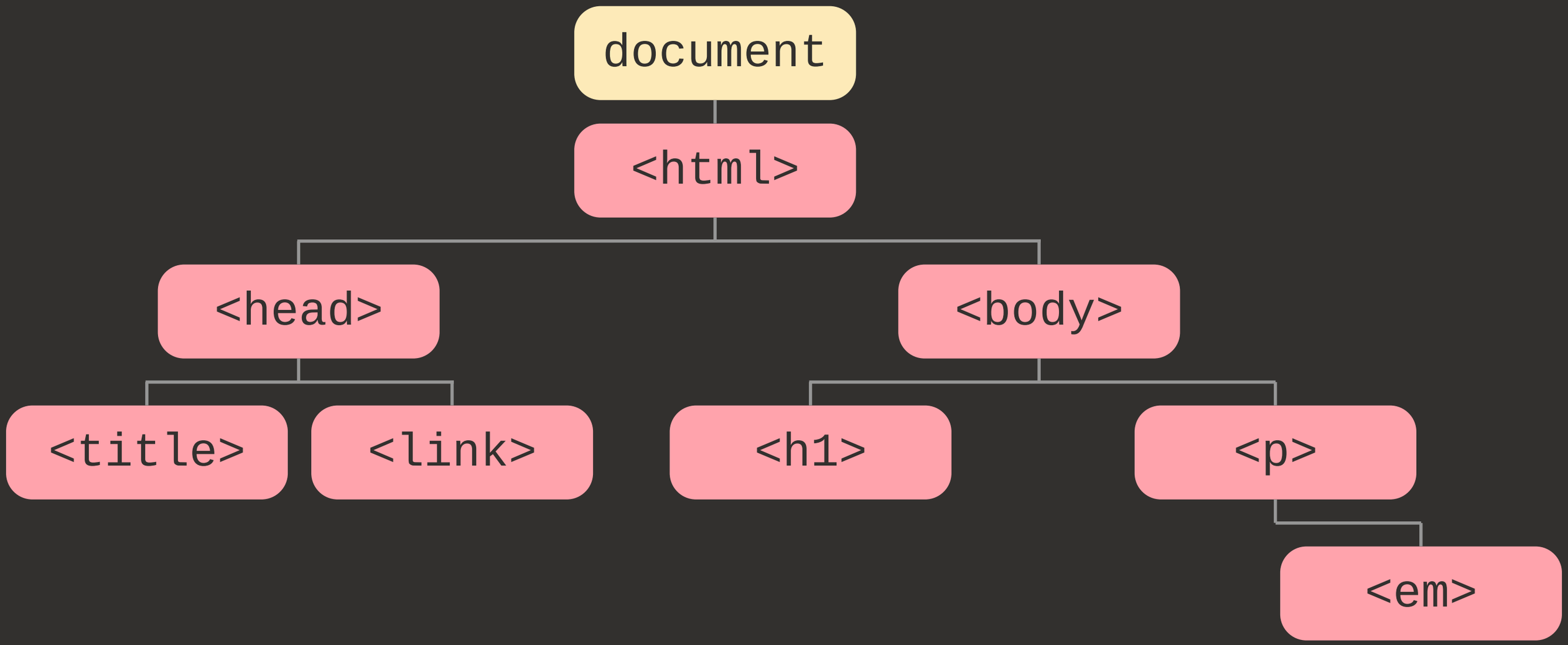
It creates a model of the page and stores it in memory

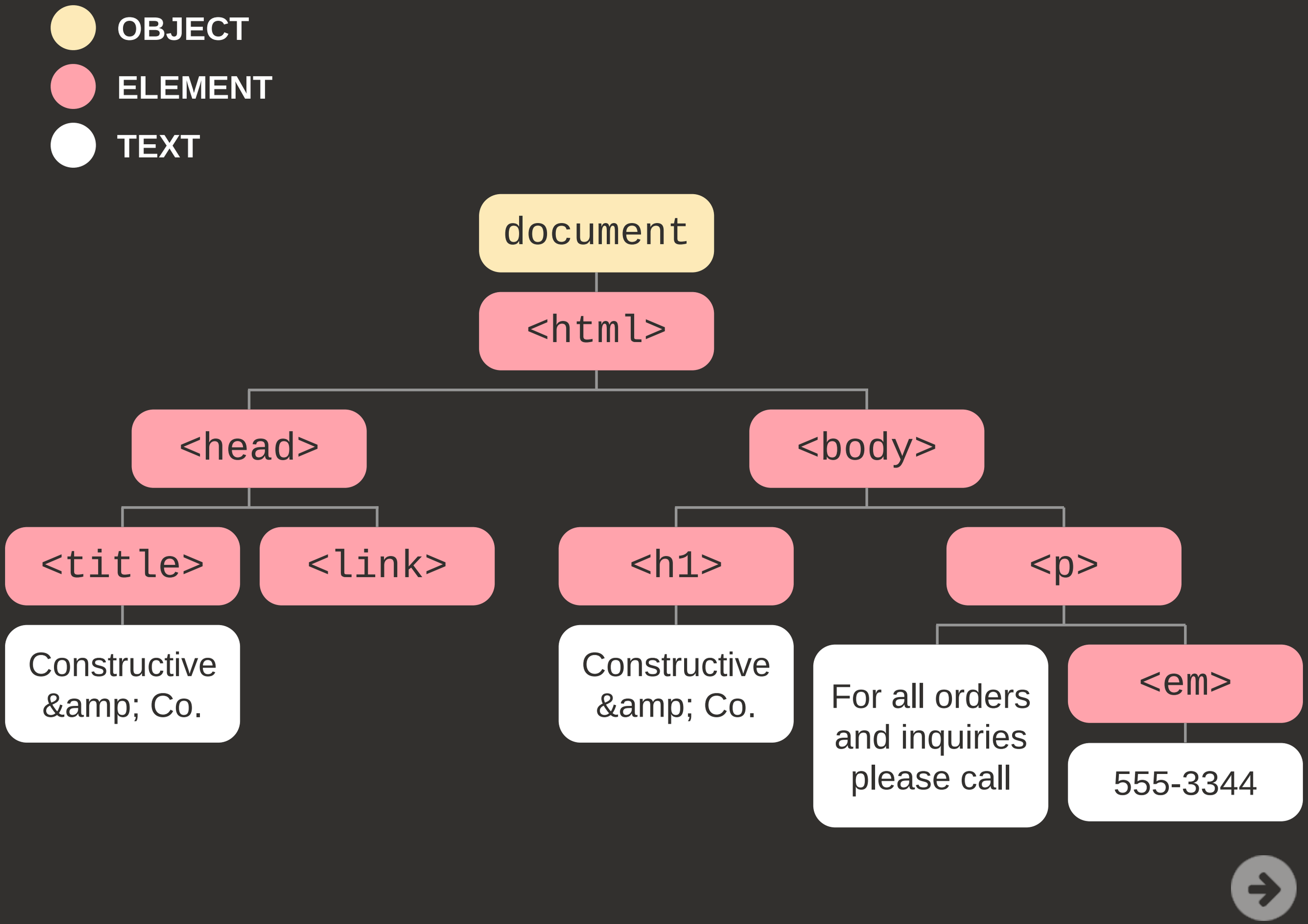
OBJECT

`document`

OBJECT

ELEMENT




OBJECT
ELEMENT
TEXT
document
<html>
<head>
<title>
Constructive & Co.
<link>
<body>
<h1>
Constructive & Co.
<p>
For all orders and inquiries please call

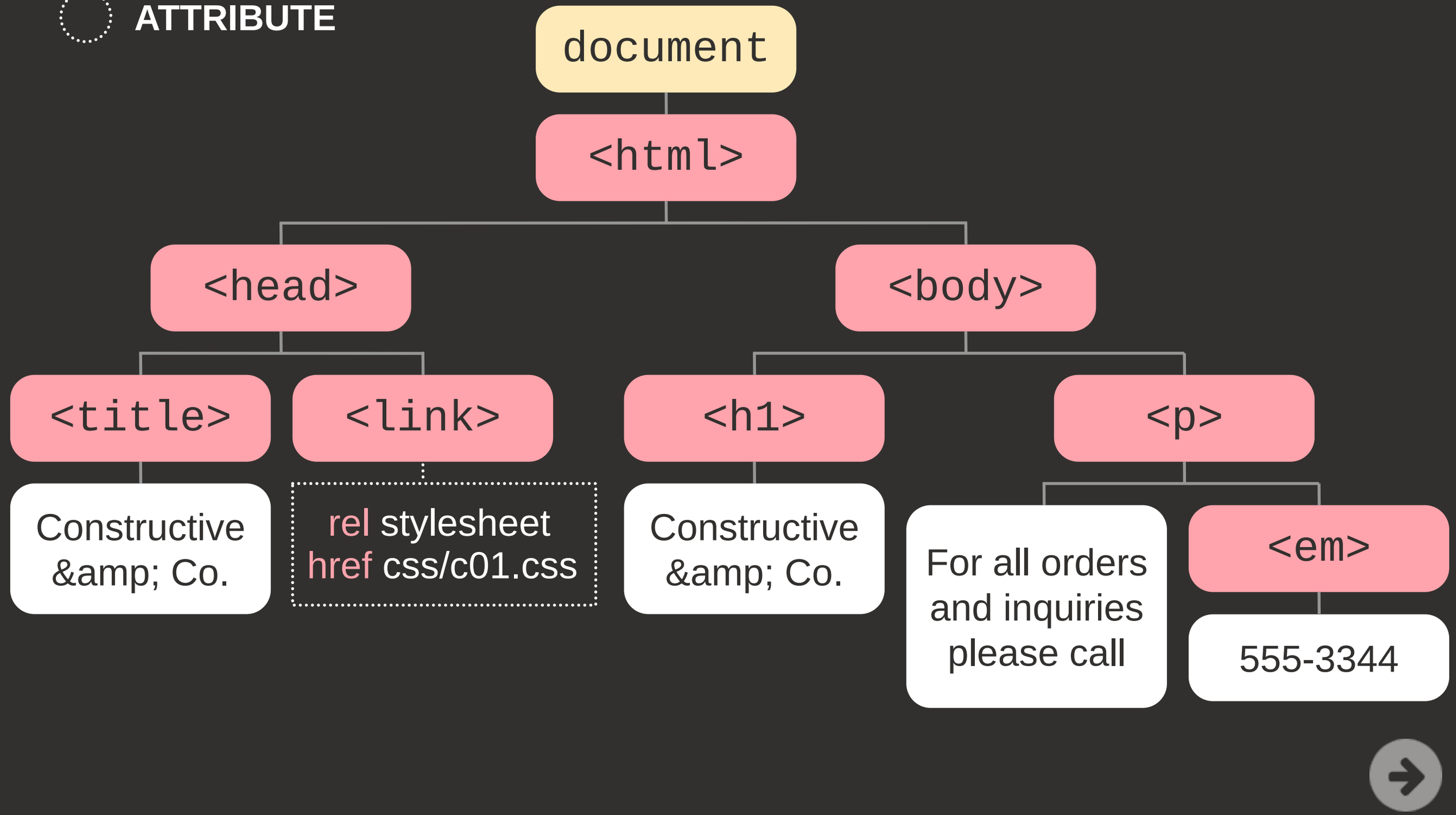
555-3344

OBJECT

ELEMENT

TEXT

ATTRIBUTE



```
<DOCTYPE html>
<html>
  <head>
    <title>Constructive &amp;amp; Co</title>
    <link rel=“stylesheet” href=“c01.css” />
  </head>
  <body>
    <h1>Constructive &amp;amp; Co</h1>
    <p>For all orders and enquiries,
    please call <em>555-3344</em></p>
  </body>
</html>
```

1

The browser receives a web page

2

It creates a model of the page and stores it in memory

3

It shows the page on screen using a rendering engine

Constructive & Co.

BESPOKE ARCHITECTURAL MODELS

WELCOME!

For all orders and inquiries please call 555-3344

DOCUMENT OBJECT MODEL – A JAVASCRIPT LOOK

The DOM specifies how:

1

Browsers
create a model of
an HTML page

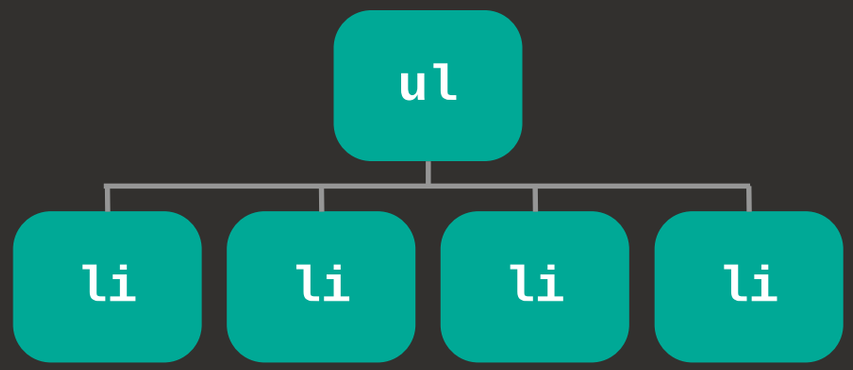
2

JavaScript
accesses / updates
an HTML page

THE DOM TREE

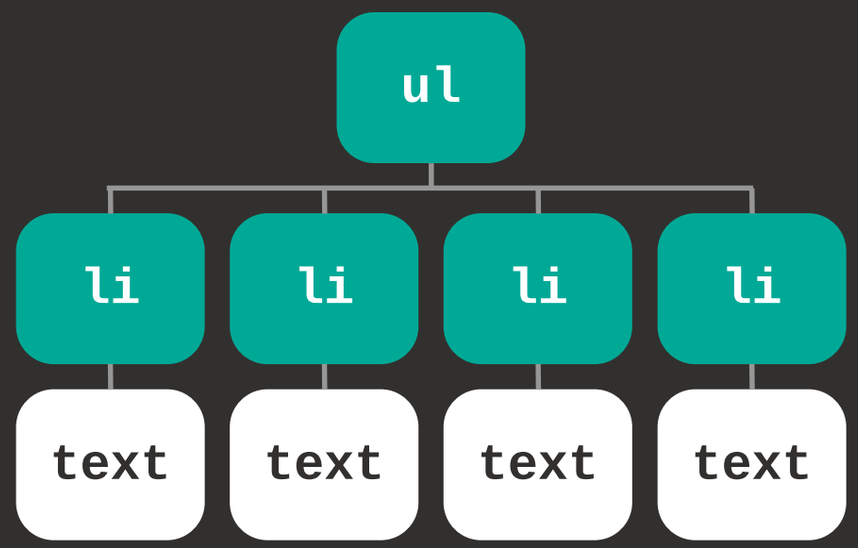
ELEMENT NODES

```
<ul>
  <li></li>
  <li></li>
  <li></li>
  <li></li>
</ul>
```



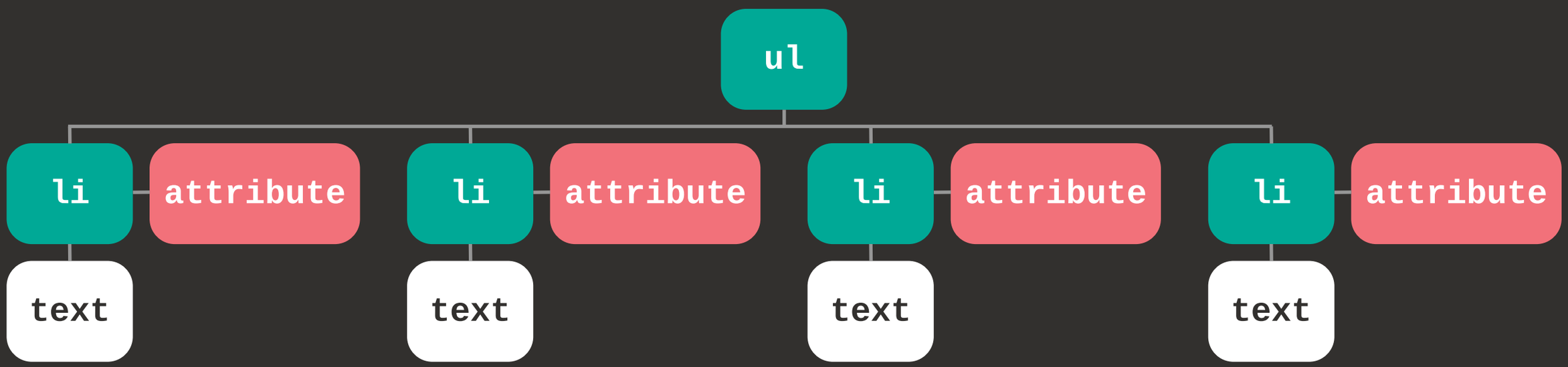
TEXT NODES

```
<ul>
  <li>fresh figs</li>
  <li>pine nuts</li>
  <li>honey</li>
  <li>balsamic vinegar</li>
</ul>
```



ATTRIBUTE NODES

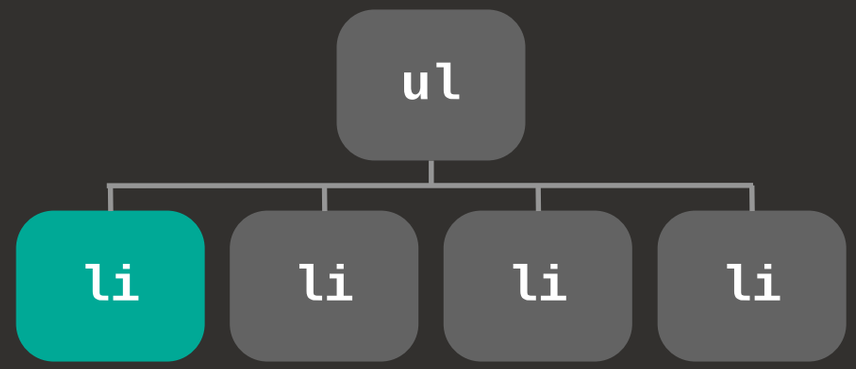
```
<ul>
  <li id=“one” class=“hot”>fresh figs</li>
  <li id=“two” class=“hot”>pine nuts</li>
  <li id=“three” class=“hot”>honey</li>
  <li id=“four”>balsamic vinegar</li>
</ul>
```



To access and update the HTML, first you select the element(s) you want to work with.

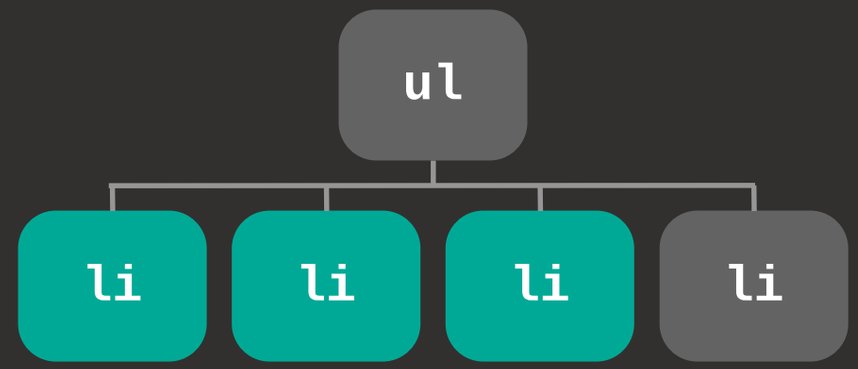
DOM QUERIES

```
<ul>
  <li id=“one” class=“hot”>fresh figs</li>
  <li id=“two” class=“hot”>pine nuts</li>
  <li id=“three” class=“hot”>honey</li>
  <li id=“four”>balsamic vinegar</li>
</ul>
```



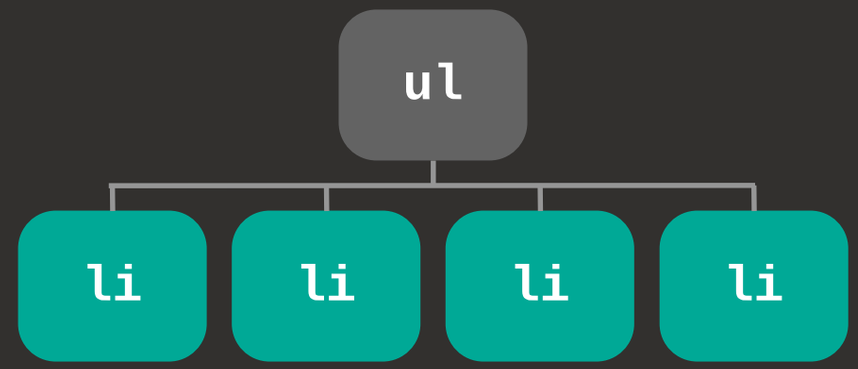

```
getElementById(‘one’);
```

```
<ul>
  <li id=“one” class=“hot”>fresh figs</li>
  <li id=“two” class=“hot”>pine nuts</li>
  <li id=“three” class=“hot”>honey</li>
  <li id=“four”>balsamic vinegar</li>
</ul>
```



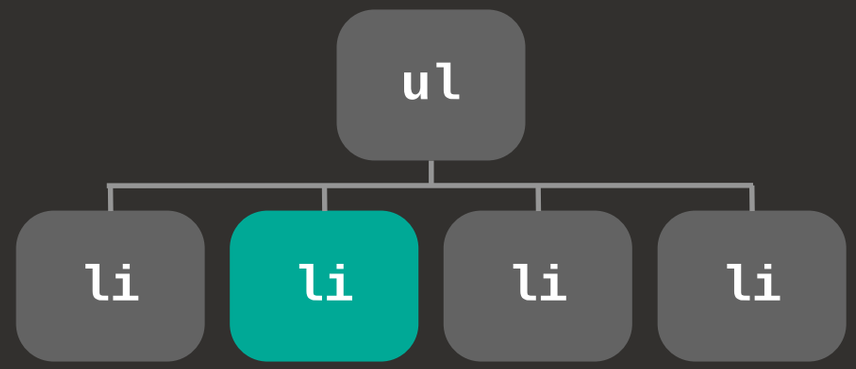

```
getElementsByClassName(‘hot’);
```

```
<ul>
  <li id=“one” class=“hot”>fresh figs</li>
  <li id=“two” class=“hot”>pine nuts</li>
  <li id=“three” class=“hot”>honey</li>
  <li id=“four”>balsamic vinegar</li>
</ul>
```



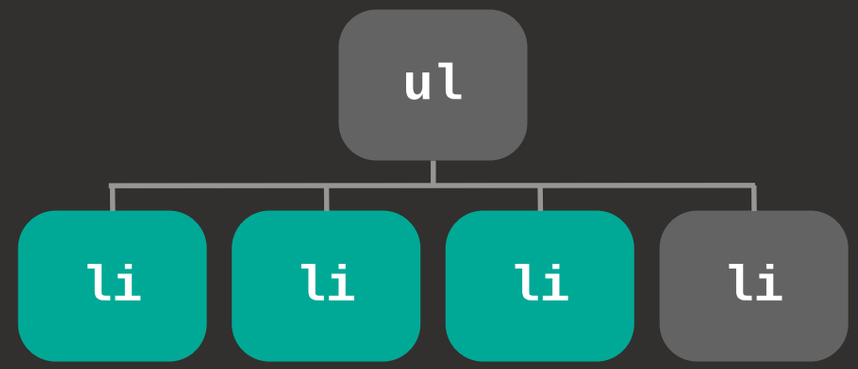

```
getElementsByTagName(‘li’);
```

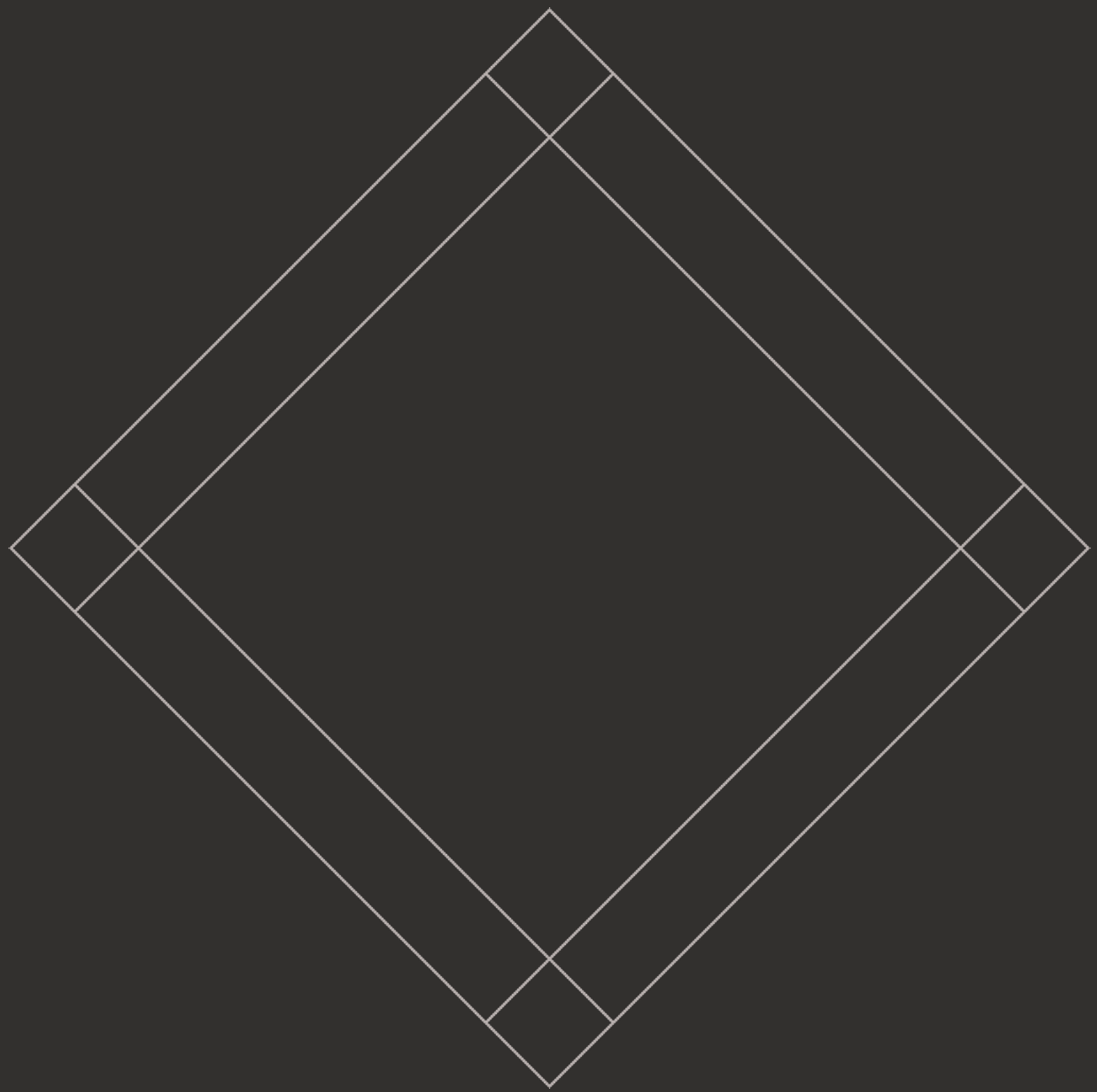
```
<ul>
  <li id=“one” class=“hot”>fresh figs</li>
  <li id=“two” class=“hot”>pine nuts</li>
  <li id=“three” class=“hot”>honey</li>
  <li id=“four”>balsamic vinegar</li>
</ul>
```




```
querySelector(‘#two’);
```

```
<ul>
  <li id=“one” class=“hot”>fresh figs</li>
  <li id=“two” class=“hot”>pine nuts</li>
  <li id=“three” class=“hot”>honey</li>
  <li id=“four”>balsamic vinegar</li>
</ul>
```




```
querySelectorAll(‘li.hot’);
```