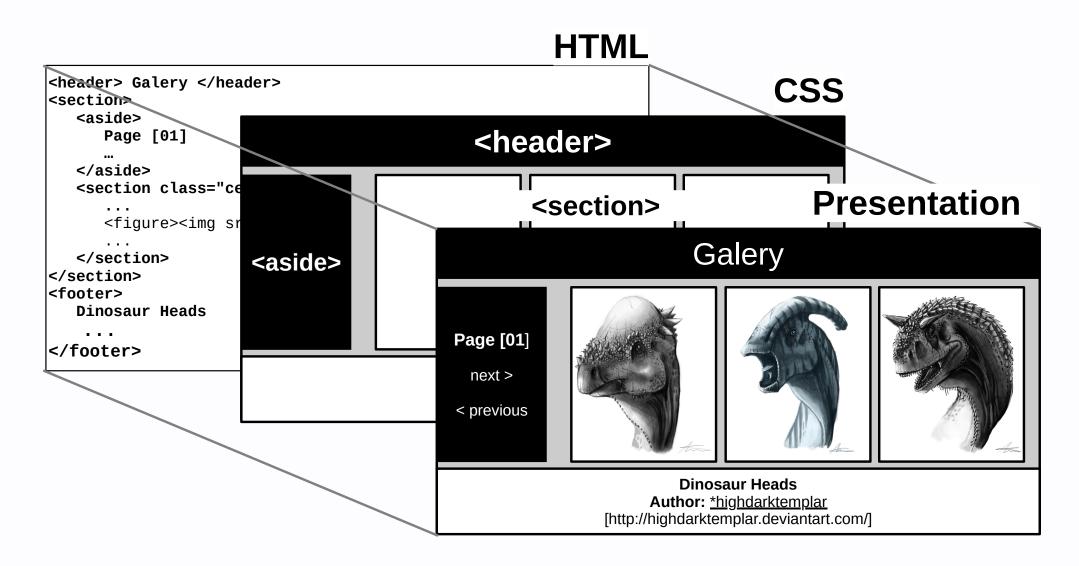
Black & White Series

DOM

Document Object Model

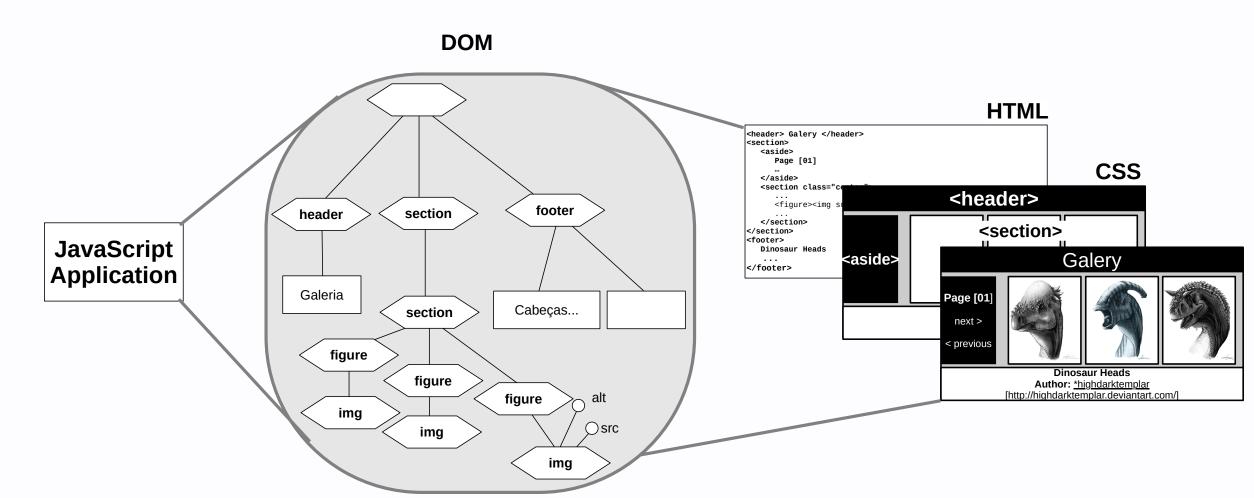
Web Layers



DOM Tree

```
<html>
  . . .
<body>
<header>
           Galeria
</header>
<section class="main">
             <section class="center">
                               <fiqure id="f1">
                                            <img src="images/pachycephalosaurus.png"</pre>
                               </figure>
                               <fiqure id="f2">
                                                                                                                                                                                                                                      nus.png"/>
                                            <img src="images/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pages/pa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               footer
                               </figure>
                                                                                                                                                                                                                                                                                                                               section
                                                                                                                                                                                 header
                               <fiqure id="f3">
                                           <img src="images/carnotaurus.png"/>
                               </figure>
                                                                                                                                                                                  Galeria
             </section>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Cabeças...
</section>
                                                                                                                                                                                                                                                                                                                               section
<footer>
                                                                                                                                                                                                                                                                                                                                                                                                                           () id="f3"
                                                                                                                                                                                                                                                ○id="f1"
           Cabeças...
</footer>
                                                                                                                                                                                                                                                                                                                                                                                                                   figure
                                                                                                                                                                                                                                                                                                                                    figure
                                                                                                                                                                                                                                                  figure
</body>
                                                                                                                                                                                                                                                                                                                                                                                                                                                              </html>
                                                                                                                                                                                                                                                                                                                                                                                                                     img
                                                                                                                                                                                                                                                                                                                                      img
                                                                                                                                                                                                                                                     img
```

JavaScript DOM View



Defining a span Target

04-1-dom.html

```
<html>
 <body>
   Weekday: <span id="show-wd"></span>
   <script type="text/javascript" src="js/04-1-dom.js">
                                                                       id="show-wd"
   </script>
 </body>
</html>
                                                       Weekday:
```

Importing an External JS

04-1-dom.html

```
<html>
 <body>
   Weekday: <span id="show-wd"></span>
   <script type="text/javascript" src="js/04-1-dom.js">
                                                                      id="show-wd"
   </script>
 </body>
</html>
                                                       Weekday:
                      04-1-dom.js
const days0fWeek =
  ['Mon', 'Tue', 'Wed', 'Thu', 'Fri', 'Sat', 'Sun']
const day = Math.trunc(Math.random() * 7)
const span0bj = document.querySelector("#show-wd")
spanObj.innerHTML = daysOfWeek[day]
```

Retrieving the span Object

```
04-1-dom.js
            const span0bj = document.querySelector("#show-wd")
                                                                       id="show-wd"
            spanObj.innerHTML = daysOfWeek[day]
                                                       Weekday:
```

Inserting HTML content

```
04-1-dom.js
             const spanObj = document.querySelector("#show-wd")
                                                                        id="show-wd"
             spanObj.innerHTML = daysOfWeek[day]
                                 innerHTML
         spanObj
                                                        Weekday:
                              </span>
                  <span...>
```

CSS Selectors

selector	syntax	examples
type	tag name	p , h1
classe	.classname	.story
identifier	#idname	#show-wd

Reference: mdn CSS selectors

document.querySelector

```
querySelector(<selector>)
```

- Returns the first element within the document that matches the selector
- This element is a DOM object

```
document.querySelector("#show-wd")
```

Returns the element identified by show-wd.

Reference: mdn Document.querySelector()

Element.innerHTML

- JavaScript property
- Gets or Sets the HTML inside an element

div Example

04-1-dom.html

```
<html>
  <body>
    <div id="show-wd"></div>
    <script type="text/javascript" src="js/04-2-dom.js">
                                                                          id="show-wd"
    </script>
  </body>
</html>
          js
                        04-2-dom.js
const days0fWeek =
  ['Monday', 'Tuesday', 'Wednesday', 'Thursday', 'Friday', 'Saturday', 'Sunday']
const day = Math.trunc(Math.random() * 7)
const divObj = document.guerySelector("#show-wd")
divObj.innerHTML = `<h1>Today is ${daysOfWeek[day]}</h1>`
```

More Complex innerHTML

04-2-dom.js const divObj = document.querySelector("#show-wd") div0bj.innerHTML = `<h1>Today is \${days0fWeek[day]}</h1>` <h1> divObj Today is </h1> <div...> </div> Friday

days0fWeek[day]

André Santanchè

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Web2Learn

santanche.github.io/web2learn/