The DOM and some DIVs

DOM - It’s all about family???

DOM stands for document object model

DOM explains the way an HTML page is structured

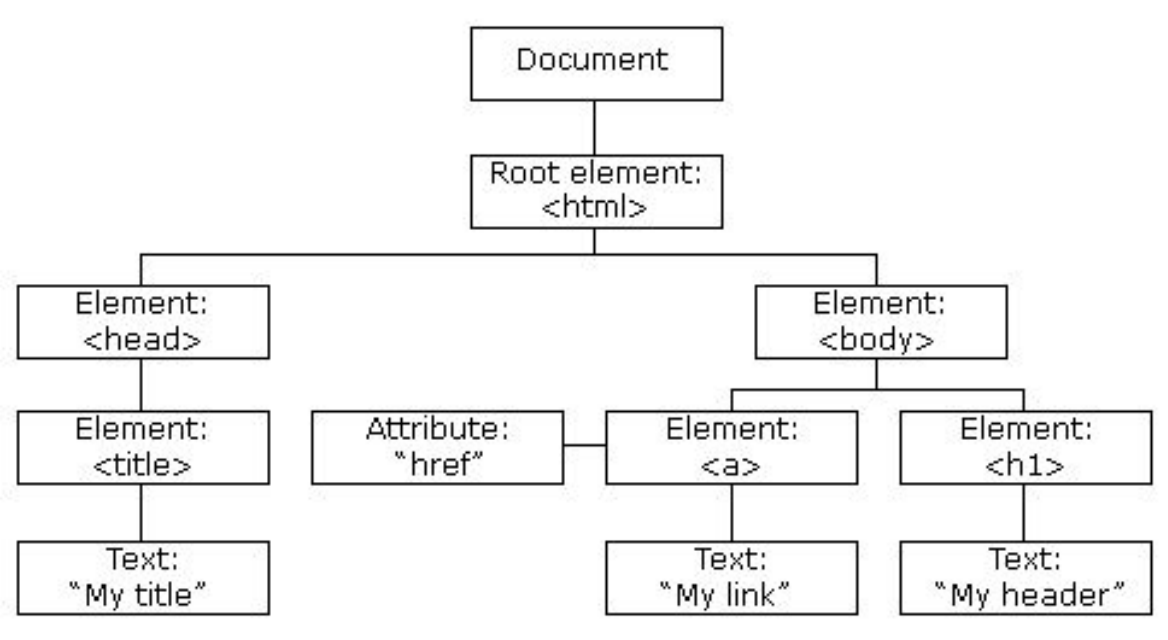
While we do not explicitly use DOM it helps for us to understand why the term is important and how it explains our webpage

Let’s start by reading:

https://www.w3schools.com/whatis/whatis_htmldom.asp

- Definitions
- The HTML DOM
- Finding HTML Elements

DOM Structure

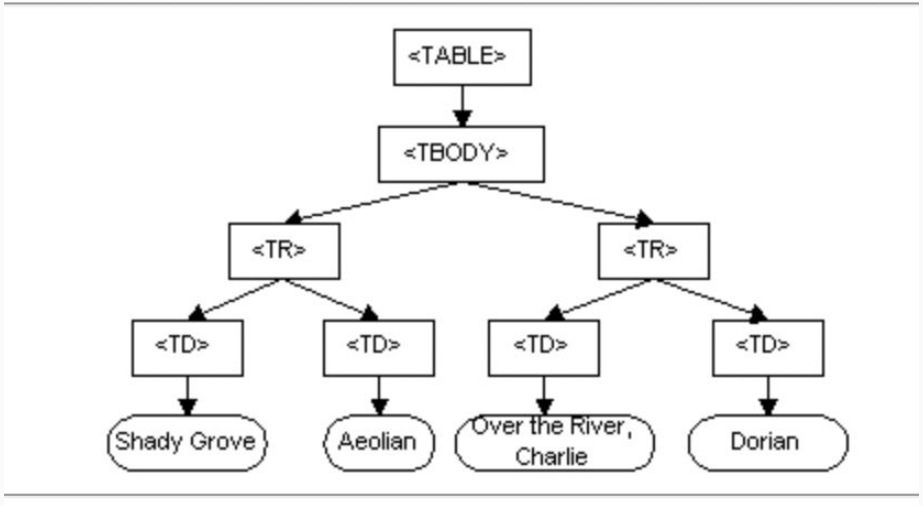


DOM Explained (again)

Code

```
<TABLE>
<TBODY>
<TR>
<TD>Shady Grove</TD>
<TD>Aeolian</TD>
</TR>
<TR>
<TD>Over the River, Charlie</TD>
<TD>Dorian</TD>
</TR>
</TBODY>
</TABLE>
```

DOM



DOM continued….like 11 times too many

Understanding DOM lets us define how we can manipulate individual elements on a page and how things are built on a page

Div…..really do we need to do this again?

A DIV is an empty container for your page

The benefit is it has no pre defined context or bias

DIVs are widely used across webpages

Dance DIV Dance!!

A couple of cool things you can do with a div

- Show/Hide the div (can also be done with a javascript timer)
- Create a div in Javascript
- Add things to it (like content and child nodes)
- Make a loading screen
- …and more!

Show/Hide

```
<script>
function abraKadabra() {
  var divOnPage = document.getElementById("magic");
  if (divOnPage.style.display == "none") {
    divOnPage.style.display = "block";
  } else {
    divOnPage.style.display = "none";
  }
}
</script>
```

```
<button onclick="abraKadabra()">Click Me</button>

<div id="magic">

  Hey you can see me now!

</div>
```

Creating a DIV in Javascript

```
var newDiv = document.createElement('div');
newDiv.innerHTML = "<text>This is text inside my new DIV<text>";
document.body.appendChild(newDiv);
```

Using a DIV as an empty container

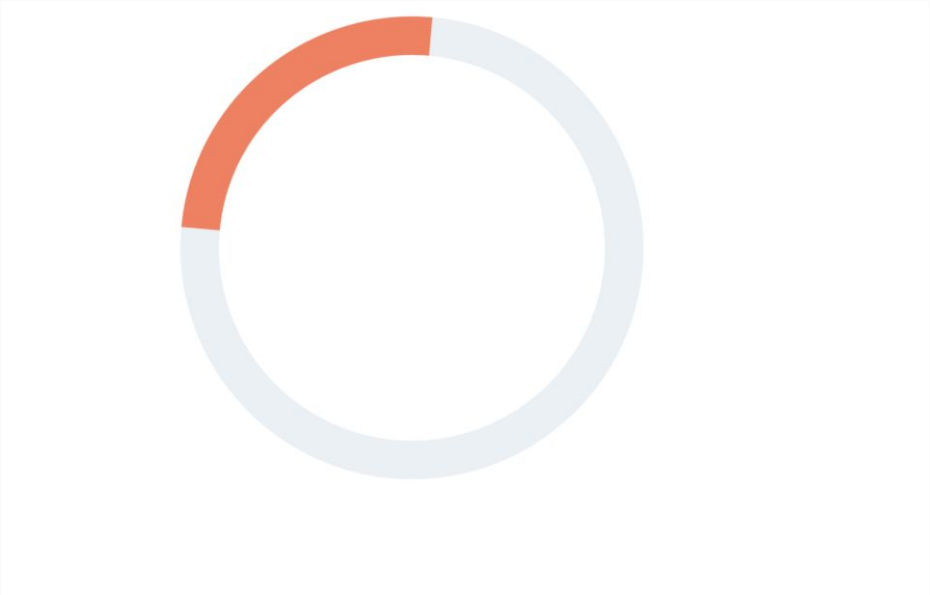
Javascript:

document.getElementById(“emptyDiv”).innerHTML = “ Adding text to the page ”;

HTML:

Loading screen sample

```
<style>
    .loader {
        margin: auto;
        border: 20px solid #EAF0F6;
        border-radius: 50%;
        border-top: 20px solid #FF7A59;
        width: 200px;
        height: 200px;
        animation: spinner 4s linear infinite;
    }
    @keyframes spinner {
        0% { transform: rotate(0deg); }
        100% { transform: rotate(360deg); }
    }
</style>
<body>
    <div class="loader"></div>
</body>
```



Using a timer to show/hide a DIV

```
<div id="loadingAnimation" class="loader"></div>

<script>

    setTimeout(() => {

      document.getElementById('loadingAnimation').style.display = 'none';

    }, 1000);

</script>
```

Homework

Read and complete the exercises in the JS HTML DOM section of W3 Schools:

https://www.w3schools.com/js/js_htmldom.asp