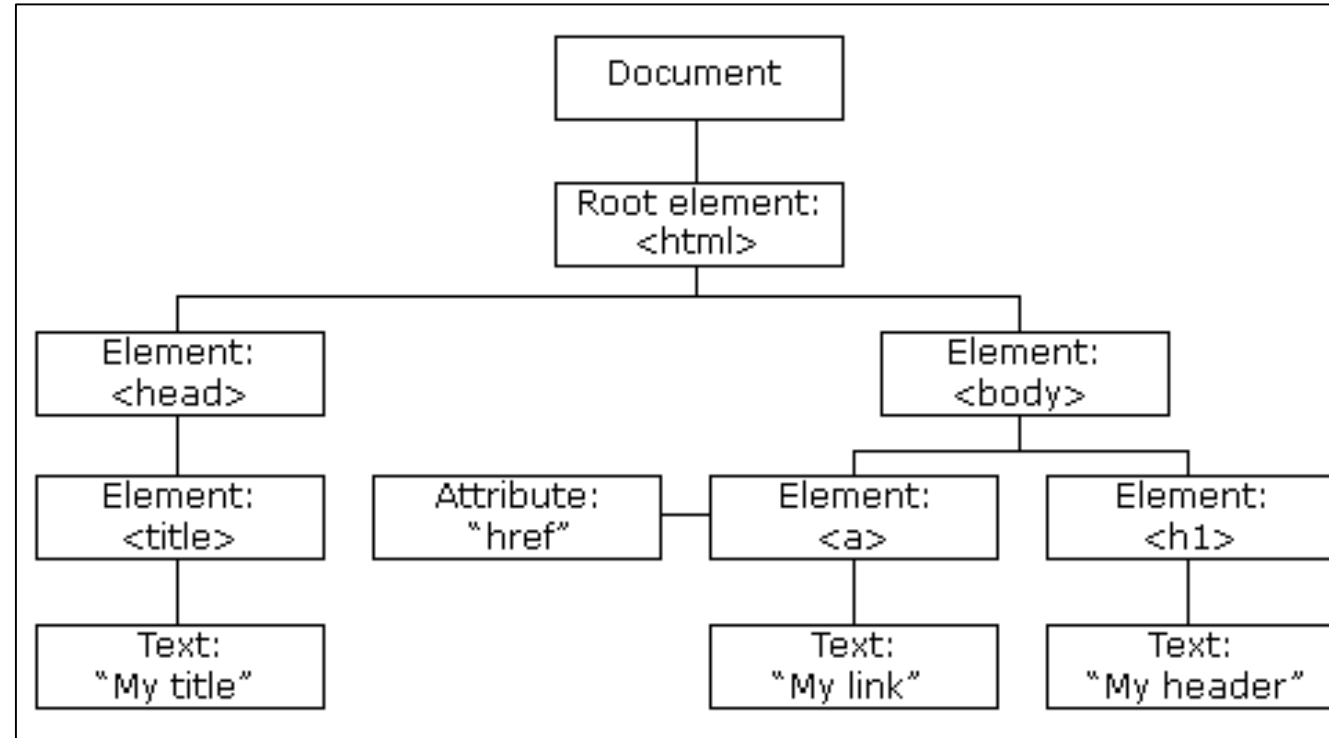


The Document Object Model

The DOM

The Document Object Model (DOM)

- Document - The file and all its content
- Object - All the things in the document and their "handles"
- Model - A way to depict the document and all its objects



Node: Parents, Children, and Siblings

- Node tree - hierarchical relationship
- Parents may have children
- Children must have a parent
- Multiple children (of one parent) are siblings (brothers or sisters)
- Root - top node
- Root - no parent

JavaScript and the DOM

- Accessed with JavaScript
- Elements == objects
- The programming interface is through **methods** and **properties**
 - A method is an action
 - A property is a value

Properties

- A property is a characteristic or attribute of the object.
- Access a property through its DOT NOTATION: object.property
- Examples
 - The URL of a web page document
`document.URL`
 - The title of a web page document
`document.title`
 - The date the web page file was last modified
`document.lastModified`
 - The src file of an image object
`mymage.src`

Method

- A method is an action the object can do or respond to:
- Writing text to a web page document:

```
document.write()
```

- Submitting a form
using JavaScript instead of `<input type="submit" ...`

```
form1.submit()
```

.getElementById() method

- The `.getElementById()` method returns the element with the specified ID
- Example:

```
var myIntro = document.getElementById("intro");
```

.addEventListener() method

- Waits for a specific "event" on a particular element (.getElementById()), then runs a *function()*

- Example:

```
myIntro.addEventListener("click", function() {  
    alert("Someone clicked me!");  
})
```