

W4D1 - Client Side JavaScript & jQuery

AGENDA

Browser Object Model (BOM)

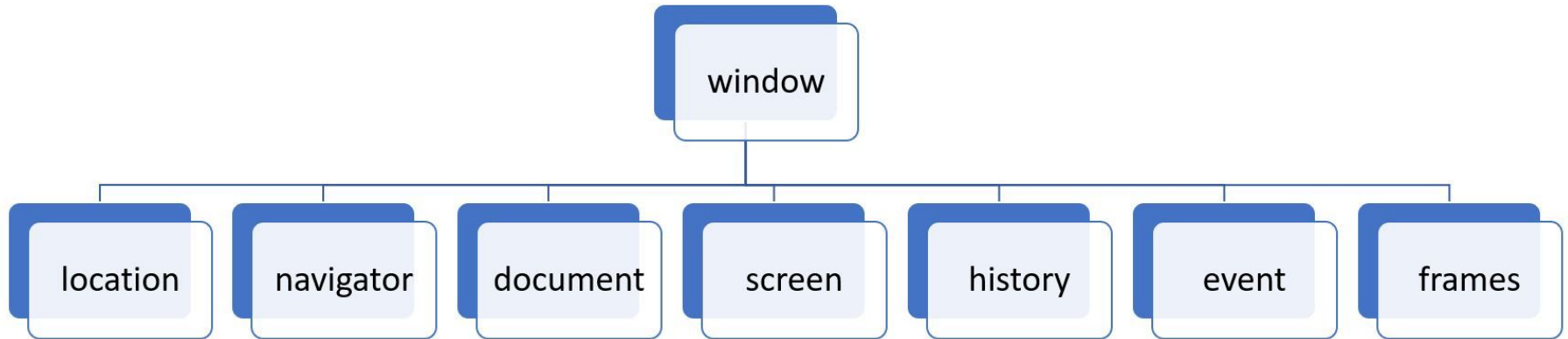
Document Object Model (DOM)

Manipulating The DOM With JavaScript

Manipulating The DOM With jQuery

Browser Object Model (BOM)

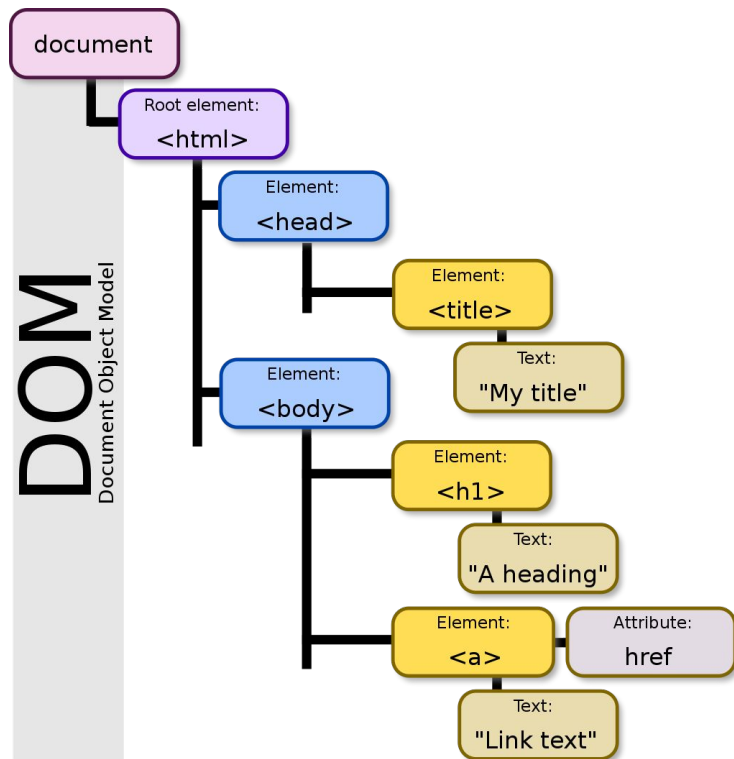
The browser object model (BOM) is a **hierarchy of browser objects** that are used to manipulate methods and properties associated with the Web browser itself.



Document Object Model (DOM)

Whenever a page is loaded into a browser, it creates a Document Object Model where each **HTML element is an object with properties** that can be accessed and manipulated with a programming language such as JavaScript.

Document Object Model (DOM)



- The document is converted into the DOM. This means that each element, starting at the root, is **represented by an object** or node in a **tree structure**.
- The DOM is used to **modify the content, structure or style of the document**.

Access DOM properties in Dev Tools

Manipulating The DOM With JavaScript

The DOM can be manipulating with JavaScript:

- `document.getElementById(idSelector);`
- `document.getElementsByTagName(tagName);`
- `document.getElementsByName(name);`
- `document.querySelector(selector);`
- `document.querySelectorAll(selector);`
- `document.getElementsByClassName(classSelector);`

Manipulating The DOM With JavaScript

- **Events** are happening all the time in the browser (click, submit, blur, etc. - try monitorEvents at the console)
- **Event listeners** are used to trigger some action (JS code) in response to an event occurring

```
element.addEventListener(event, eventHandler)
```

Demo: Creating a Todo List

Manipulating The DOM With jQuery

jQuery is a fast, small, and feature-rich JavaScript library.

It makes things **much simpler**:

- HTML document traversal and manipulation
- Event handling
- Animation
- Ajax much simpler
- Works across a multitude of browsers

Demos:

1. DOM Traversal
2. Create HTML Dynamically with jQuery

Questions?

