

## Lecture 3

### MOD8: Advanced Web Programming

#### 1. DOM Manipulation using Javascript

- document.write
- getElementById
- accessing value of an input field
- innerHtml
- appendChild

#### 2. Events in Javascript

- onClick
- Event Bubbling
- e.stopPropagation()

### DOM

The DOM is a W3C (World Wide Web Consortium) standard.

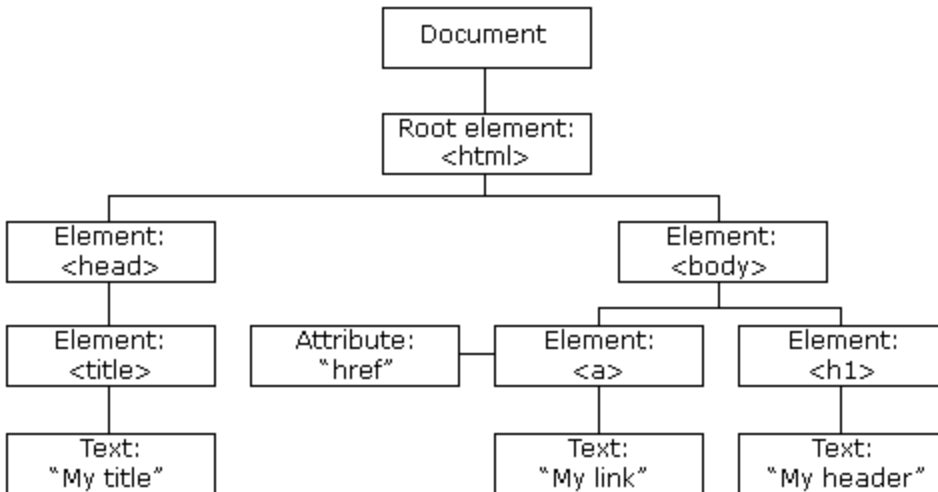
The DOM defines a standard for accessing documents:

*"The W3C Document Object Model (DOM) is a platform and language-neutral interface that allows programs and scripts to dynamically access and update the content, structure, and style of a document."*

With the HTML DOM, JavaScript can access and change all the elements of an HTML document

When a web page is loaded, the browser creates a **Document Object Model** of the page.

The **HTML DOM** model is constructed as a tree of **Objects**:



With the object model, JavaScript gets all the power it needs to create dynamic HTML:

- JavaScript can change all the HTML elements in the page
- JavaScript can change all the HTML attributes in the page
- JavaScript can change all the CSS styles in the page
- JavaScript can remove existing HTML elements and attributes
- JavaScript can add new HTML elements and attributes
- JavaScript can react to all existing HTML events in the page
- JavaScript can create new HTML events in the page

In other words: **The HTML DOM is a standard for how to get, change, add, or delete HTML elements**

Reference: [https://www.w3schools.com/js/js\\_htmlDOM.asp](https://www.w3schools.com/js/js_htmlDOM.asp)