

JavaScript: Introduction to the DOM

CISC 282

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What Is the DOM?

- Document Object Model
 - First proposed by the W3C in the mid-1990s
- An application programming interface (API) for HTML
 - Set of objects, properties and methods
 - Allows a programming language to interact with an HTML document
 - Commonly associated with JavaScript

Window

- Represents the web browser's window
 - Displaying the current HTML document
- Access via the global object **window**
- The core element in DOM
 - All "global" DOM items actually belong to **window**
 - Both properties and functions
 - Access using **window.item** or simply **item**
 - e.g., **document.write(...)** or **window.document.write(...)**

Some **Window** Properties

Property	Type	Description
document	Document	The current HTML document
history	History	The user's recently visited pages
location	Location	The browser's current URL
screen	Screen	The user's screen

Some Window Functions

Method	Description
<code>alert(...)</code> , <code>confirm(...)</code> , <code>prompt(...)</code>	Produce dialog boxes
<code>open(...)</code> , <code>close()</code>	Open or close a browser window
<code>moveBy(x, y)</code> , <code>moveTo(x, y)</code>	Change the browser window's position
<code>resizeBy(w, h)</code> , <code>resizeTo(w, h)</code>	Change the browser window's size
<code>scrollBy(x, y)</code> , <code>scrollTo(x, y)</code>	Scroll within the browser window

Element

- The base class for every element in the document

Property/Function	Type	Description
<code>innerHTML</code>	String	All content between the element's opening and closing tags
<code>getAttribute(name)</code>	String	Returns the value of the attribute with the given <code>name</code>
<code>setAttribute(name, value)</code>	-	Sets the value of attribute <code>name</code> to <code>value</code>

Document

- The actual HTML document and all of its elements

Property	Type	Description
body	Body	The document's body

Method	Return	Description
getElementById(<i>id</i>)	Element	The element with the given <i>id</i>
querySelector(<i>selector</i>)	Element	The first element with the given CSS <i>selector</i>
getElementsByClassName(<i>name</i>)	NodeList	All elements with the class <i>name</i>
getElementsByTagName(<i>name</i>)	NodeList	All elements with the tag <i>name</i>