

# What is the DOM ?

Author: Mihai Rotaru

Date: 1 Dec 2011

The DOM is an interface which provides a way of accessing and modifying structured documents, such as XML, XHTML and SVG. The DOM is usually accessed via it's public API, in a platform- and operating system-independent manner.

The DOM has a troubled history, due to the fact that the early browsers market was very competitive, which reflected negatively on the willingness of the companies producing them to cooperate, develop and implement standards. W3C later managed to get companies such as Netscape and Microsoft to collaborate and develop a standard for a scripting language ( ECMAScript ), and a DOM afterwards, in late 1998.

The concept of a DOM is used by browsers, which expose an API to enable JavaScript code to access and modify the DOM. For example, the following code will find an element which has the 'foo' id and make it's background colour green:

```
document.getElementById( 'foo' ).backgroundColor="green" ;
```

This example illustrates a few important concepts about the DOM - instead of being a monolithic specification, it is divided into several separate documents, each describing a specific area. For Level 2 DOM, it comprises a 'Core' ( <http://www.w3.org/TR/2000/REC-DOM-Level-2-Core-20001113/> ), and the other recommendations extend on it. For example, the Level 2 HTML DOM extends some components which are part of the 'Core' specification, specializing them according to the needs of HTML. The HTML DOM 'HTMLDocument' interface, for example ( <http://www.w3.org/TR/2003/REC-DOM-Level-2-HTML-20030109/html.html#ID-26809268> ) was derived from the core 'Document' interface, and similarly the HTMLElement interface was derived from the core 'Element' interface.

Such extensions of the 'Core' DOM allow for a wider range of application, and therefore more uses. The aforementioned HTML DOM allows for HTML-specific manipulation - for example, hiding an element with a certain ID. The DOM Level 2 Style specification allows scripts to dynamically access and update the content of stylesheets, therefore affecting how the document looks.