

Cornerstone of Interactions

In this lesson, we touch upon the cornerstone of interactions.

WE'LL COVER THE FOLLOWING



- The many talents of the DOM
- The three parts of the DOM definition

The many talents of the DOM

Do not think that DOM is only for standardized and browser vendors.

Developers are the real winners of DOM's existence!

➡ Almost every interaction between a user and a web page is built on DOM. When you click a component of a page, a node of the DOM hierarchy receives the event and responds by executing some code.

➡ Most interactive user interface elements change the DOM dynamically to provide a UI effect. Web pages that keep the UI responsive while running queries against the server in the background use the DOM to update the page when results arrive, too.

➡ Many pages generate additional UI components at the client-side, right after the page is loaded, such as thumbnails, quick links, table of contents, or other elements that help with page navigation. The scripts behind these activities also utilize the DOM.

➡ Moving charts, animated figures, interactive footers and banners all leverage the DOM.

The DOM Defined by the W3C Standard The World Wide Web Consortium's standard defines the DOM like [w3](#):

*“The **Document Object Model** is a platform- and language-neutral interface that will allow programs and scripts to **dynamically access** and **update** the content, structure and style of documents.*

The document can be further processed and the results of that processing can be incorporated back into the presented page.”

The three parts of the DOM definition

The above standard separates the DOM definition into three different parts:

It contains an abstract **Core DOM** description, which is a model for any structured document.

This abstraction is taken on to an **XML DOM** (standard model for XML documents), and to an

HTML DOM (standard model for HTML documents).

In the *next lesson*, we will go onto study the application programming interface of the DOM.

See you there! :)