Web Storage API

The Web Storage API does not refer to DOM, it refers to the window

Available to js via global variable: window

**Web Storage API**

The Web Storage API provides mechanisms by which browsers can store key/value pairs, in a much more intuitive fashion than using cookies.

**Web Storage concepts and usage**

The two mechanisms within Web Storage are as follows:

1. **sessionStorage** maintains a separate storage area for each given origin that's available for the duration of the page session (as long as the browser is open, including page reloads and restores).

* Stores data only for a session, meaning that the data is stored until the browser (or tab) is closed.
* Data is never transferred to the server.
* Storage limit is larger than a cookie (at most 5MB).

1. localStorage does the same thing, but persists even when the browser is closed and reopened.

* Stores data with no expiration date, and gets cleared only through JavaScript, or clearing the Browser cache / Locally Stored Data.
* Storage limit is the maximum amongst the two.

These mechanisms are available via the Window.sessionStorage and Window.localStorage properties (to be more precise, the Window object implements the WindowLocalStorage and WindowSessionStorage objects, which the localStorage and sessionStorage properties hang off) — invoking one of these will create an instance of the Storage object, through which data items can be set, retrieved and removed. A different Storage object is used for the sessionStorage and localStorage for each origin — they function and are controlled separately.

**Web Storage interfaces**

1. Storage

Allows you to set, retrieve and remove data for a specific domain and storage type (session or local).

1. Window

The Web Storage API extends the Window object with two new properties — Window.sessionStorage and Window.localStorage — which provide access to the current domain's session and local Storage objects respectively, and a storage event handler that fires when a storage area changes (e.g., a new item is stored).

1. StorageEvent

The storage event is fired on a document's Window object when a storage area changes.

**Examples**

To illustrate some typical web storage usage, we have created a simple example, imaginatively called Web Storage Demo. The landing page provides controls that can be used to customize the color, font and decorative image. When you choose different options, the page is instantly updated; in addition your choices are stored in localStorage, so that when you leave the page then load it again later on your choices are remembered.

In addition, we have provided an event output page — if you load this page in another tab, then make changes to your choices in the landing page, you'll see the updated storage information outputted as the StorageEvent is fired.