



WEB TECHNOLOGIES 1

LocalStorage

LOCALSTORAGE

- LocalStorage is a type of web storage that allows Javascript websites and apps to store and access data right in the browser with no expiration date.
- This means the data stored in the browser will persist even after the browser window has been closed.
- They are part of the web storage API, are two tools to save key/value pairs locally.



LOCALSTORAGE

- Its useful for saving data such as user preferences like theme on a website, remembering shopping cart items, or remembering a user is logged into a website.
- Previously, cookies were the only option for remembering this type of local, temporary data.
- Local storage has a significantly higher storage limit and doesn't get sent with every HTTP request, so it can be a better option for client-side storage.



LOCALSTORAGE

- The data is saved locally only and can't be read by the server, which eliminates the security issue that cookies present.
- It allows for much more data to be saved (10Mb for most browsers).
- It's simpler to use and the syntax is very straightforward.
- Web storage is data stored locally in a user's browser. There are two types of web storage:
 - **Local Storage** - data with no expiration date that will persist after the browser window is closed.
 - **Session Storage** - data that gets cleared after the browser window is closed




LOCALSTORAGE VS SESSIONSTORAGE

- LocalStorage and sessionStorage accomplish the exact same thing and have the same API,
- With sessionStorage the data is persisted only until the window or tab is closed,
- While with localStorage the data is persisted until the user manually clears the browser cache or until your web app clears the data



SESSIONSTORAGE

- The sessionStorage object is used much less often than localStorage.
 - Properties and methods are the same, but it's much more limited:
 - The sessionStorage exists only within the current browser tab.
 - Another tab with the same page will have a different storage.
 - But it is shared between iframes in the same tab (assuming they come from the same origin).
 - The data survives page refresh, but not closing/opening the tab.
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LOCALSTORAGE METHODS

Method	Description
setItem()	Add key and value to local storage
getItem()	Retrieve a value by the key
removeItem()	Remove an item by key
clear()	Clear all storage
key()	Passed a number to retrieve nth key of a localStorage



SETITEM()

- This method just as the name implies allows you to store values in the localStorage object.
- It takes two parameters, a key and a value. The key can be referenced later to fetch the value attached to it.
- **window.localStorage.setItem('name', 'arjun');**
where *name* is the **key** and *arjun* is the **value**.
- Also note that localStorage can only store strings.
- To store arrays or objects you would have to convert them to strings.

GETITEM()

- The `getItem()` method allows you to access the data stored in the browser's `localStorage` object.
- It accepts only one parameter which is the key and returns the value as a string.
- To retrieve the user key stored above:
- **`window.localStorage.getItem('user');`**



REMOVEITEM()

- The `removeItem()` method when passed a key name, will remove that key from the storage if it exists.
- If there is no item associated with the given key, this method will do nothing.
- **`window.localStorage.removeItem('name');`**



CLEAR() & KEY()

- This method, when invoked clears the entire storage of all records for that domain. It does not receive any parameters.
- `window.localStorage.clear();`
- The `key()` method comes in handy in situations where you need to loop through keys and allows you pass a number or index to local storage to retrieve the name of the key.
- `var KeyName = window.localStorage.key(index);`



LOCALSTORAGE JAVASCRIPT LIMITATIONS

- The following are limitations and also ways to NOT use localStorage:
 - Do not store sensitive user information in localStorage.
 - It is not a substitute for a server based database as information is only stored on the browser,
 - localStorage is limited to 5MB across all major browsers.
 - localStorage is quite insecure as it has no form of data protection and can be accessed by any code on your web page.
 - localStorage is synchronous. Meaning each operation called would only execute one after the other.

