Local Storage in JavaScript

In JavaScript, local storage is a feature that allows web developers to store data locally within the user's browser. This data can be retrieved and used later, even after the user has closed their browser or navigated away from the website. We will learn local storage in detail in Advanced JS.

Introduction to Local Storage

Local storage is based on the key-value pair storage model. This means that data is stored in the form of a key-value pair, where the key is a string and the value can be any JavaScript data type, such as a string, number, or object.

To use local storage in JavaScript, you can use the **localStorage** object, which is part of the window object in the browser.

Here's an example of how to use local storage to store and retrieve data:

To store data: localStorage.setItem('key', 'value');

To retrieve data: var value = localStorage.getItem('key');

When you store data in local storage, it is stored as a string. So, in order to retrieve and use that data as a JavaScript object, you need to parse the string using JSON.parse.

Here's an example of how to use JSON.parse to retrieve data from local storage:

const obj = {name: 'John', age: 30};

// Storing data in local storage

localStorage.setItem('myData', JSON.stringify(obj));

// Retrieving data from local storage and parsing it as a JavaScript object

var data = JSON.parse(localStorage.getItem('myData'));

// Using the retrieved data as a JavaScript object

console.log(data.name); // Output: John

console.log(data.age); // Output: 30

To remove data: localStorage.removeItem('key');

Viewing Local Storage Data in Browsers

In most modern web browsers, you can view the data stored in local storage using the browser's developer tools. Here's how you can view local storage data in some popular web browsers:

Google Chrome:

1. Open the web page where the local storage data is stored.

2. Right-click anywhere on the page and select "Inspect" from the context menu. This will open the Chrome Developer Tools.

3. Click on the "Application" tab in the Developer Tools.

4. In the left-hand menu, click on "Local Storage". This will show you the data stored in local storage for the current website.

Mozilla Firefox:

1. Open the web page where the local storage data is stored.

2. Right-click anywhere on the page and select "Inspect Element" from the context menu. This will open the Firefox Developer Tools.

3. Click on the "Storage" tab in the Developer Tools.

4. In the left-hand menu, click on "Local Storage". This will show you the data stored in local storage for the current website.

Microsoft Edge:

1. Open the web page where the local storage data is stored.

2. Right-click anywhere on the page and select "Inspect Element" from the context menu. This will open the Edge Developer Tools.

3. Click on the "Application" tab in the Developer Tools.

4. In the left-hand menu, click on "Local Storage". This will show you the data stored in local storage for the current website.

It's important to note that local storage has some limitations, such as a maximum storage capacity of around 5-10 MB and the fact that the data is stored in plaintext and can potentially be accessed by other scripts on the same domain. As such, it's important to use local storage with caution and not to store sensitive information.