

- **localStorage**
- **sessionStorage**
- **cookies**

localStorage

- persistent in browser memory.
- accessible with JavaScript *only*.
- **not automatically sent to the server** during an HTTP request.

localStorage

```
localStorage.setItem('greeting', 'Hello World!');
```

```
localStorage.removeItem('greeting');
```

sessionStorage

- deleted once the browser tab or window is closed.
- accessible with JavaScript *only*.
- **not automatically sent to the server** during an HTTP request.

sessionStorage

```
sessionStorage.setItem('greeting', 'Hello World!');
```

```
sessionStorage.removeItem('greeting');
```

cookies 🍪

- persistent in browser memory.
- inaccessible with JavaScript (with the **HttpOnly** flag).
- **automatically sent to the server** during an HTTP request.

Authentication data stored with **localStorage** or **sessionStorage** are vulnerable to cross-site scripting (XSS) attacks.

cookies when used with the HttpOnly flag are not accessible with JavaScript and are thus immune to XSS attacks.

cookies when used with the Secure flag ensure cookies can only be sent securely through HTTPS.

Cookies *are* vulnerable to cross-site request forgery (CSRF) attacks.

Flags to help mitigate CSRF:

- SameSite
- X-CSRF-TOKEN