

# ChatGPT: All properties of a cookie

A cookie in the context of web development has several properties that control its behavior and scope. Here's a comprehensive list of all the properties of a cookie:

---

## 1. name

- The name of the cookie (key).
- Must be unique within the same path and domain.
- Case-sensitive.

### Example:

Set-Cookie: username=John

---

## 2. value

- The value of the cookie.
- Can be any string but must be URL-encoded if it contains special characters.

### Example:

Set-Cookie: username=JohnDoe

---

## 3. expires

- Specifies the expiration date and time of the cookie.
- If omitted, the cookie becomes a **session cookie**, deleted when the browser is closed.

### Example:

Set-Cookie: username=JohnDoe; expires=Wed, 21 Oct 2025 07:28:00 GMT

---

## 4. max-age

- Specifies the cookie's lifetime in seconds.
- Overrides expires if both are set.
- If max-age=0, the cookie is deleted immediately.

**Example:**

Set-Cookie: username=JohnDoe; max-age=3600

---

**5. domain**

- Specifies the domain the cookie is available to.
- If omitted, defaults to the origin of the cookie-setting request.
- Subdomains are included if explicitly specified.

**Example:**

Set-Cookie: username=JohnDoe; domain=example.com

---

**6. path**

- Specifies the URL path that must exist in the requested resource's URL for the cookie to be sent.
- Defaults to the path of the request that set the cookie.

**Example:**

Set-Cookie: username=JohnDoe; path=/account

---

**7. secure**

- Indicates that the cookie should only be sent over HTTPS connections.
- Prevents cookies from being sent over an unencrypted HTTP connection.

**Example:**

Set-Cookie: username=JohnDoe; Secure

---

**8. HttpOnly**

- Prevents the cookie from being accessed via JavaScript (e.g., document.cookie).
- Enhances security by mitigating cross-site scripting (XSS) attacks.

**Example:**

Set-Cookie: username=JohnDoe; HttpOnly

---

## 9. SameSite

- Controls whether the cookie is sent with cross-site requests.
- Possible values:
  - **Strict**: The cookie is sent only for same-origin requests.
  - **Lax**: The cookie is sent with top-level navigation and some GET requests.
  - **None**: The cookie is sent with all cross-origin requests (must be paired with Secure).

### Example:

Set-Cookie: username=JohnDoe; SameSite=Strict

---

## 10. Priority (Optional, Experimental)

- Indicates the priority of the cookie when the browser is deciding which cookies to evict.
- Possible values:
  - **Low**
  - **Medium** (default)
  - **High**

### Example:

Set-Cookie: username=JohnDoe; Priority=High

---

## 11. size (Non-Configurable)

- Refers to the size of the cookie, which is determined by the name and value combined.
  - Browsers typically limit the size of a single cookie to 4096 bytes.
- 

## 12. host-only (Implicit)

- Indicates whether the cookie is restricted to the host that set it (default behavior).
- 

## Summary of Common Cookie Attributes

Property	Description
----------	-------------

name	The key of the cookie.
------	------------------------

## Property Description

value	The value associated with the key.
expires	Expiration date and time.
max-age	Lifetime in seconds.
domain	Domain the cookie applies to.
path	Path the cookie applies to.
secure	Send only over HTTPS.
HttpOnly	Prevent JavaScript access.
SameSite	Controls cross-site cookie behavior.
Priority	Sets eviction priority (optional).

---

## Examples

### Basic Cookie:

Set-Cookie: username=JohnDoe

### Cookie with Attributes:

Set-Cookie: username=JohnDoe; expires=Wed, 21 Oct 2025 07:28:00 GMT; path=/;  
domain=example.com; Secure; HttpOnly; SameSite=Strict

Let me know if you'd like further clarification on any of these properties! 😊