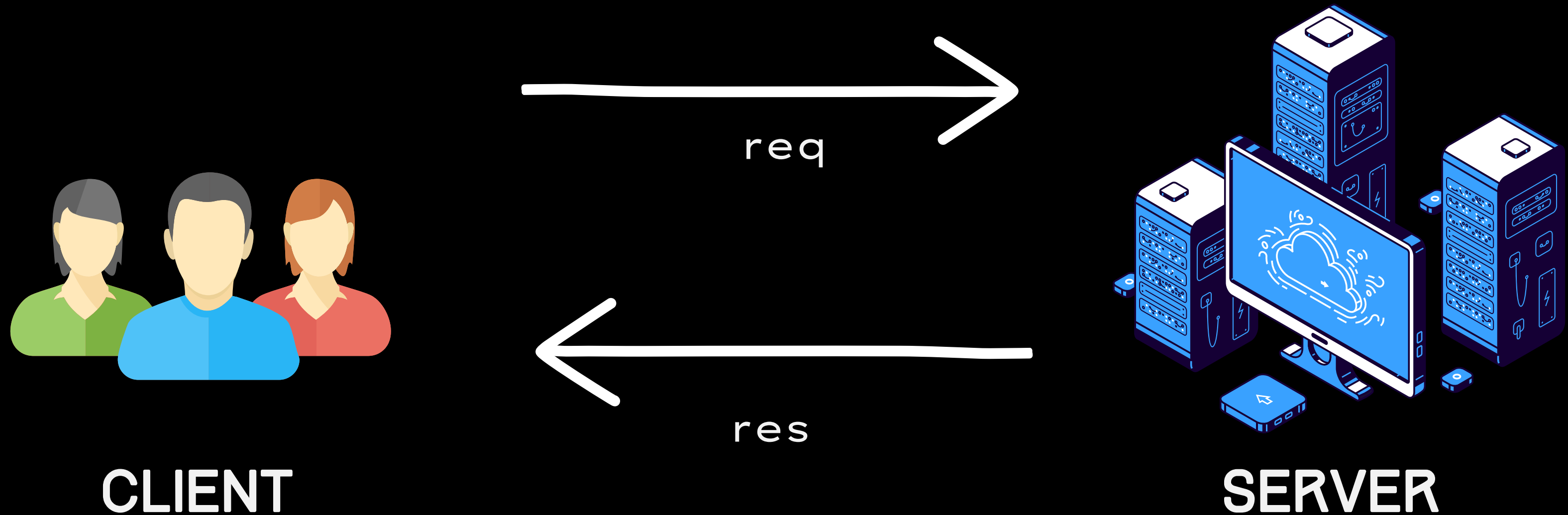


HTTP COOKIES

WHAT ARE COOKIES?

- A small piece of data which server sends to the browser with a user request.
 - Browser may store these cookies in its local storage.
-

CLIENT-SERVER ARCHITECTURE



USE OF COOKIES

- ⬆ Session management
- ⬆ Personalization
- ⬆ Tracking
- ⬆ Authentication

HTTP REQUEST METHODS

- ⬆ GET
- ⬆ POST
- ⬆ PATCH
- ⬆ PUT
- ⬆ DELETE

JAVASCRIPT COOKIES

Cookies can be created in Javascript in two types



⬆ Client-side Creation

⬆ Server-side Creation

BASIC JAVASCRIPT

DECLARING A FUNCTION

```
const maxi = (a, b) => {  
  if (a > b)  
    return "a is bigger";  
  else  
    return "b is smaller";  
}  
console.log((3,5));
```

ADDING SCRIPT TAG

```
<script>  
  function add(a, b) {  
    console.log(a + b);  
  }  
  add(2, 3);  
</script>
```

CLIENT-SIDE

- Cookies are saved in name-value pair
eg: name="JohnDoe"



```
let username = 'wlug'
function setCookie(name, value, age) {
  let maxAge = "max-age=" + age;
  document.cookie = name + "=" + value + ";" + maxAge +
};path="/";
setCookie(username,2,5)
```


SERVER SIDE

- Cookies are set by the server using set-cookie header
- They are also called session cookies

```
const express = require("express")
const app = express()

app.get("/", (req, res) => {
  res.set("set-cookie", ["serverCookie=2003"]);
  res.sendFile(`${__dirname}/index.html`);
})

app.listen(3000, () => {
  console.log("Listening on port 3000");
});
```

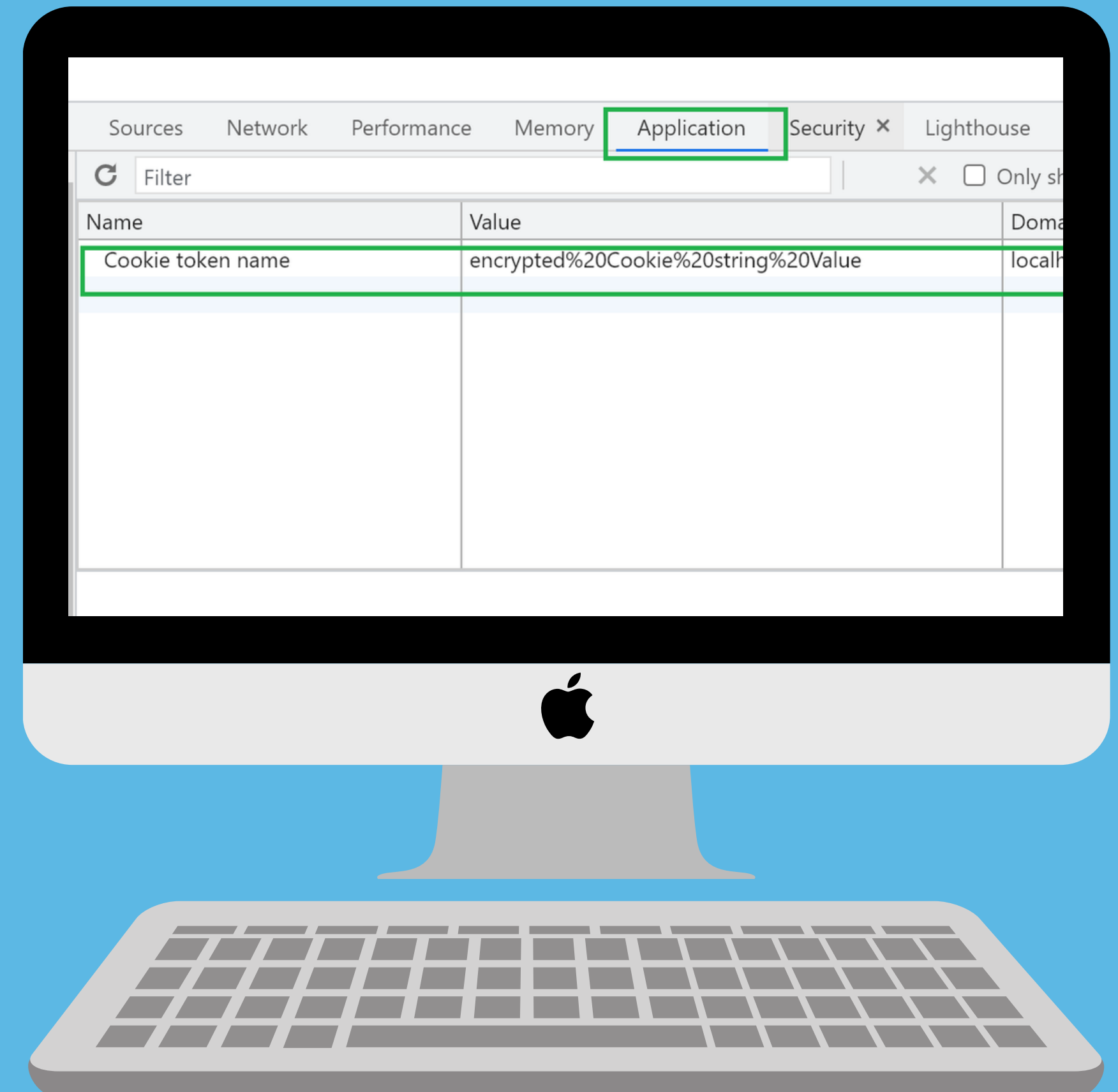
COOKIE TYPES

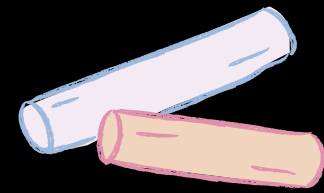
- ⬆ Session Cookies
- ⬆ Permanent Cookies
- ⬆ Http Only Cookies
- ⬆ Secure Cookies
- ⬆ Third-Party Cookies



COOKIE PROPERTIES

- ⬆ Sent with every request
- ⬆ Cookie Scope : Domain and Path
- ⬆ Expires/Max-Age
- ⬆ Secure
- ⬆ Same Site

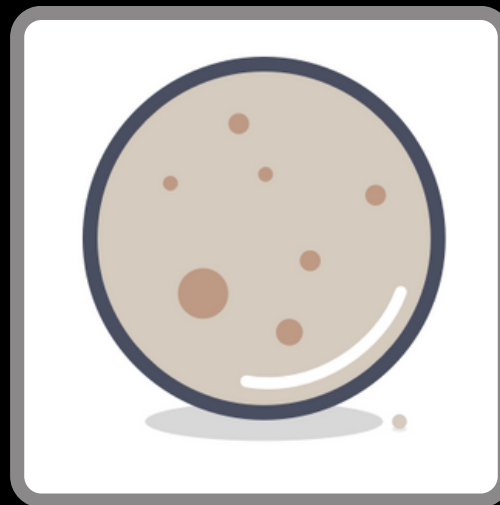




El Blackboard



SAME SITE



STRICT

Restricts cookie sharing altogether



LAX

Allows cookie sharing on same domain



NONE

Allows Everything

COOKIE SECURITY

- Session Hijacking
- Cross Site Request Forgery
- Cross Site Scripting

