
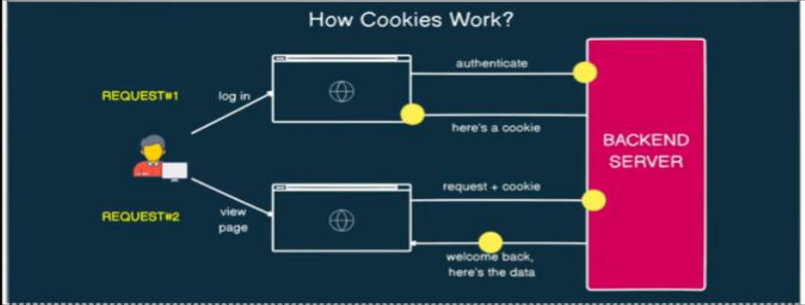


Cookies And Session::



18.1 What are Cookies




How Cookies Work?

REQUEST#1: log in → authenticate → here's a cookie

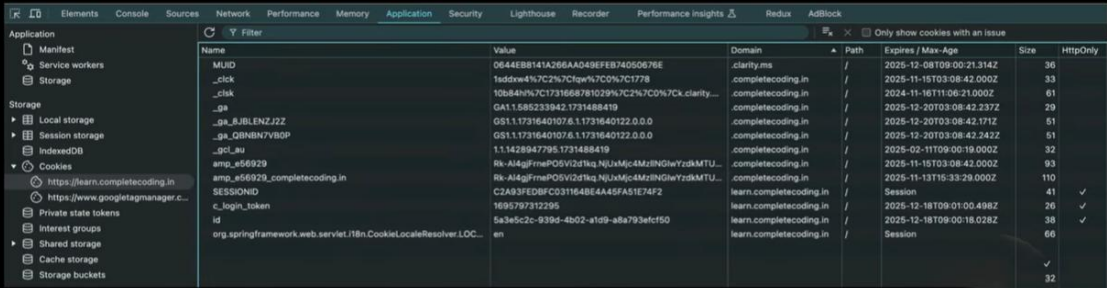
REQUEST#2: view page → request + cookie → welcome back, here's the data

BACKEND SERVER


1. Cookies are small pieces of data stored in the user's browser by server.
2. They help websites remember user information and preferences between page loads or visits.
3. Cookies can manage user sessions and store data for personalized experiences.



18.1 What are Cookies



Name	Value	Domain	Path	Expires / Max-Age	Size	HttpOnly
MUID	0644EBB141A26AA049EF874050676E	.clarity.ms	/	2025-12-08T09:00:21.314Z	36	
_click	16ddw4%7C2%7Cfsw%7C0%7C1778	.completecoding.in	/	2025-11-15T03:08:42.000Z	33	
_clk	10b84N%7C1731668781029%7C2%7C0%7Ck.clarity...	.completecoding.in	/	2024-11-16T11:06:21.000Z	61	
_ga	GA1.1585233942.1731488419	.completecoding.in	/	2025-12-20T03:08:42.237Z	29	
_ga_BJBLENZJZZ	GS1.17316401076.11731640122.0.0.0	.completecoding.in	/	2025-12-20T03:08:42.171Z	51	
_ga_QBNBN7V8DP	GS1.17316401076.11731640122.0.0.0	.completecoding.in	/	2025-12-20T03:08:42.242Z	51	
_gcl_u	1.1328947795.1731488419	.completecoding.in	/	2025-02-11T09:00:19.000Z	32	
emp_a56929	Rk-A4agFmePOGvG3hQaNUAMq4MzINdIwYzdBMTU...	.completecoding.in	/	2025-11-15T03:08:42.000Z	93	
emp_a56929_completecoding.in	Rk-A4agFmePOGvG3hQaNUAMq4MzINdIwYzdBMTU...	.completecoding.in	/	2025-11-13T15:33:29.000Z	110	
SESSIONID	C2A93FED8FC0311648E4A48FA51E74F2	learn.completecoding.in	/	Session	41	✓
id	169579712295	learn.completecoding.in	/	2025-12-18T09:01:00.498Z	26	✓
c_login_token	5a3e5c2c-939d-4b02-atd9-a8a793efcf90	learn.completecoding.in	/	2025-12-18T09:00:18.028Z	38	✓
org.springframework.web.servlet.i18n.CookieLocaleResolver.LO...	en	learn.completecoding.in	/	Session	66	



18.3 Checking Login State

1.

```
exports.postLogin = (req, res, next) => {  
  console.log(req.body);  
  req.isLoggedIn = true;  
  res.redirect("/");  
};
```



18.3 Checking Login State

2.

```
<% if (isLoggedIn) { %>
  <a href="/favourites" class="bg-blue-600 hover:bg-blue-700 text-white
    Favourites
  </a>
  <a href="/host/host-homes" class="bg-blue-600 hover:bg-blue-700 text-white
    Host Homes
  </a>
  <a href="/host/add-home" class="bg-blue-600 hover:bg-blue-700 text-white
    Add Home
  </a>
<% } %>
```



18.3 Checking Login State

3.

```
res.render("host/edit-home", {
  home: home,
  editing: editing,
  pageTitle: "Edit Your Home",
  isLoggedIn: req.isLoggedIn,
});
```



18.3 Checking Login State

4.

```
app.use(storeRouter);
app.use("/host", (req, res, next) => {
  if (!req.isLoggedIn) {
    return res.redirect("/login");
  }
  next();
});
app.use("/host", hostRouter);
```



18.4 Using a Cookie

2.

```
exports.postLogin = (req, res, next) => {  
  console.log(req.body);  
  res.cookie("isLoggedIn", true);  
  res.redirect("/");  
};
```

3.

```
app.use((req, res, next) => {  
  req.isLoggedIn = req.get('Cookie')?.split('=')[1] || false;  
  console.log(req.isLoggedIn);  
  next();  
});
```

✓ Better & Safe Way (using `cookie-parser`)

If you use `cookie-parser` middleware in Express:

```
js  
const cookieParser = require('cookie-parser');  
app.use(cookieParser());
```

Then you can do:

```
js  
req.isLoggedIn = req.cookies.isLoggedIn === 'true';
```



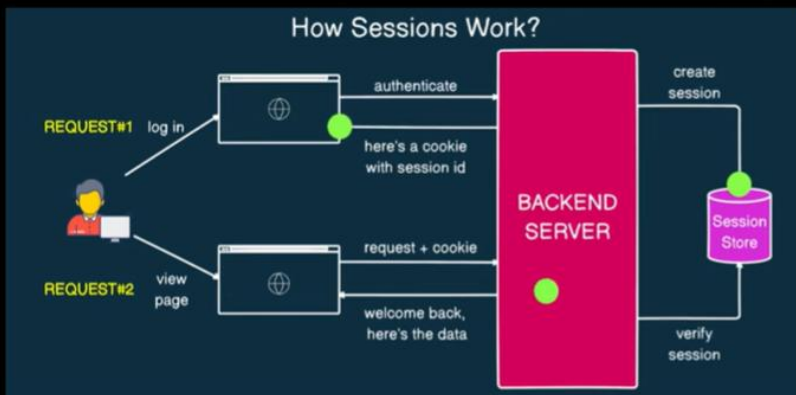
18.6 Problem with Cookies

1. Cookies can be intercepted or stolen, posing security risks.
2. They have limited storage capacity (about 4KB).
3. Users can delete or modify cookies, leading to data loss or tampering.
4. Data in cookies is not encrypted, making sensitive information vulnerable.
5. Storing important info in cookies exposes it to client-side attacks.





18.7 What are Sessions



1. Sessions are server-side storage mechanisms that track user interactions with a website.
2. They maintain user state and data across multiple requests in a web application.
3. Sessions enable persistent user experiences by maintaining state between the client and server over stateless HTTP



18.8 Installing Session Package

```
prashantjain@Prashants-MacBook-Pro 13 mongoose % npm install express-session
added 6 packages, and audited 264 packages in 2s
48 packages are looking for funding
  run `npm fund` for details
found 0 vulnerabilities
```

```
const session = require('express-session');
```

```
app.use(bodyParser.urlencoded({ extended: true }));
app.use(session({
  // Secret key used to sign the session ID cookie and encrypt session data
  secret: 'Complete Coding Secret',
  // Forces session to be saved back to the session store, even if not modified
  resave: false,
  // Forces a session that is "uninitialized" to be saved to the store
  saveUninitialized: true,
}));
```




18.9 Creating a Sessions

3.

```
exports.postLogin = (req, res, next) => {  
  console.log(req.body);  
  req.session.isLoggedIn = true;  
  res.redirect("/");  
};
```

4.

Application		Filter		
	Name	Value	Do...	
Manifest				
Service workers				
Storage				
	connect.sid	s%3Ao1svY1dKn7Pltaijb0U...	loc...	
	isLoggedIn	false	loc...	



18.9 Creating a Sessions

5.

```
exports.getIndex = (req, res, next) => {  
  console.log(req.session, req.session.isLoggedIn);  
  Home.find().then((registeredHomes) => {
```

```
    Session {  
      cookie: { path: '/', _expires: null, originalMaxAge: null, httpOnly: true },  
      isLoggedIn: true  
    } true
```



18.10 Saving Session in DB

★ 176 **connect-mongodb-session** Lightweight MongoDB-based session store built and maintained by MongoDB.

The screenshot shows the npm package page for **connect-mongodb-session**. The package is version 5.0.0, published 10 months ago, and is public. It has 2 dependencies, 88 dependents, and 41 versions. The description states it is a MongoDB-backed session storage for connect and Express, designed to be a well-maintained and fully-featured replacement for modules like connect-mongo. The page also includes a 'MongoDBStore' section explaining that the module exports a single function which takes an instance of connect (or Express) and returns a MongoDBStore class that can be used to store sessions in MongoDB. It notes that it can store sessions for Express 4. The right sidebar shows the install command `npm i connect-mongodb-session`, the repository link `github.com/mongodb-js/connect-mongo`, the homepage link `github.com/mongodb-js/connect-mongo`, and a weekly download count of 13,575.



18.10 Saving Session in DB

```
prashantjain@Prashants-MacBook-Pro 13 mongoose % npm install connect-mongodb-session
added 3 packages, and audited 267 packages in 2s

48 packages are looking for funding
  run `npm fund` for details

found 0 vulnerabilities
```

```
const MongoDBStore = require('connect-mongodb-session')(session);

const MONGO_DB_URL = "mongodb+srv://root:root@kgcluster.ie6mb.mongodb.net/";

const store = new MongoDBStore({
  uri: MONGO_DB_URL,
  collection: 'sessions'
});
```

```
app.use(session({
  // Secret key used to sign the session ID cookie and encrypt session data
  secret: 'Complete Coding Secret',
  // Forces session to be saved back to the session store, even if not modified
  resave: false,
  // Forces a session that is "uninitialized" to be saved to the store
  saveUninitialized: true,
  store: store,
}));
```

In App.js file::

```
0  const session = require("express-session");
1  const MongoDBStore = require("connect-mongodb-session")(session);
2
3
4  const db_path =
5    "mongodb+srv://sagar389:sagar389@rentalcluster.zliqyr1.mongodb.net/homereental?retryWrites=true&w=majority&appName=rentalCluster";
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authController.js

17-CookiesAndSession > controllers > authController.js > postLogout > postLogout

```
1  exports.getLogin = (req, res, next) => {
2    res.render("auth/login", {
3      pageTitle: "Login",
4      currentPage: "login",
5      isLoggedIn: false,
6    });
7  };
8
9  exports.postLogin = (req, res, next) => {
10   // console.log("data :", req.body)
11   // req.isLoggedIn = true;
12   // res.cookie('isLoggedIn', true)
13   req.session.isLoggedIn = true;
14   res.redirect('/');
15 }
16 exports.postLogout = (req, res, next) => {
17   // res.cookie('isLoggedIn', false)
18   // req.session.isLoggedIn = false;
19   req.session.destroy(() => {
20     res.redirect('/login');
21   });
22 }
23
```