HTTP cookies & User Authentication

Module 3 Week 7

Notes Repo: https://github.com/C-Shi/lhl-flex-lecture

Learning Objectives

HTTP stateless and cookies

Read and Set cookie

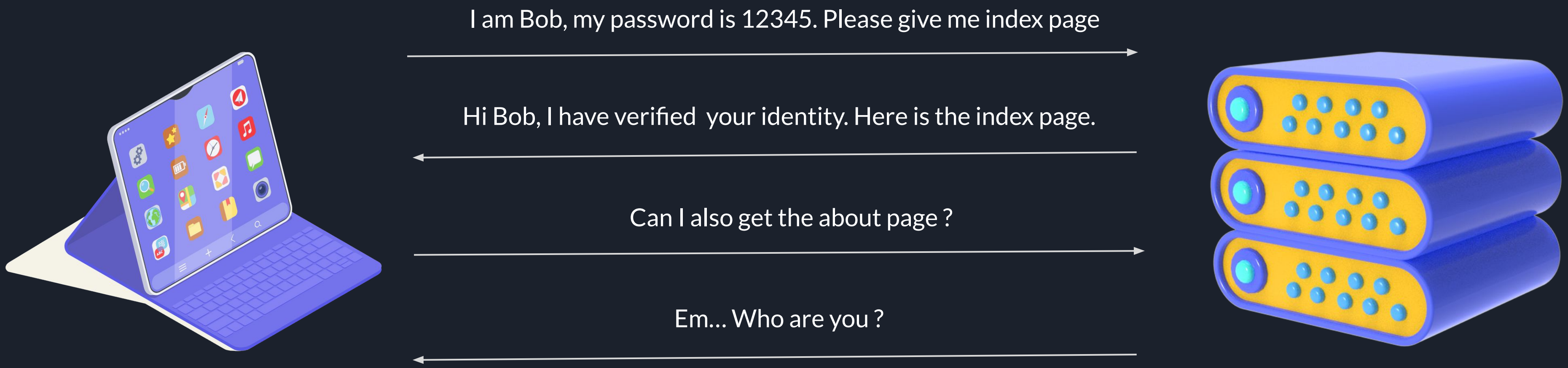
User Authentication with cookie

Session vs Cookies

Stretch Topic

HTTP stateless

HTTP don’t remember states after a request/response cycle end



I am Bob, my password is 12345. Please give me index page

Hi Bob, I have verified your identity. Here is the index page.

Can I also get the about page ?

Em… Who are you ?

What is Cookies

Cookie is a baked snack that is typically small, flat and sweet

Cookie usually contains flour, sugar and egg

Client use cookie to bribe server, so that server bypass your identity verification

This is a joke

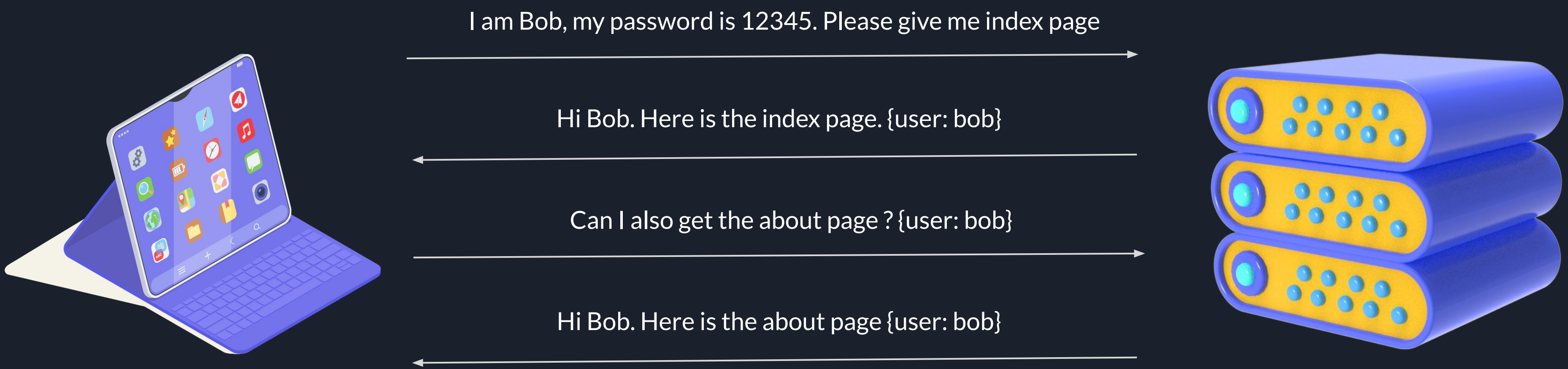
Seriously, what is HTTP cookies

A piece of key/value pair stored in browser

Carried between HTTP requests

To identify a user, to track website visits, to optimized user experience

Server READ cookie from request, and SET cookie in response



I am Bob, my password is 12345. Please give me index page

Hi Bob. Here is the index page. {user: bob}

Can I also get the about page ? {user: bob}

Hi Bob. Here is the about page {user: bob}

Today’s Code Example

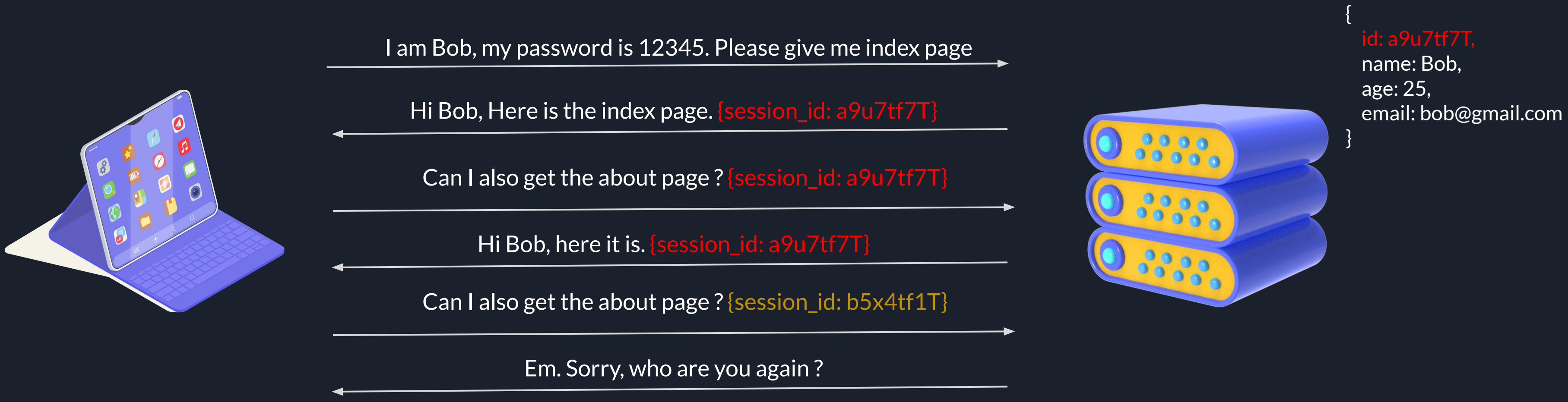
Session

A temporary and interactive information interchange between two communicating devices

Information store on the server side.

Server provide a key (session_id) to access the session data, using cookie

Session provide extra layer of security as information is stored on the server



I am Bob, my password is 12345. Please give me index page →

← Hi Bob, Here is the index page. {session_id: a9u7tf7T}

Can I also get the about page ? {session_id: a9u7tf7T} →

← Hi Bob, here it is. {session_id: a9u7tf7T}

Can I also get the about page ? {session_id: b5x4tf1T} →

← Em. Sorry, who are you again ?

```
{
  id: a9u7tf7T,
  name: Bob,
  age: 25,
  email: bob@gmail.com
}
```

Registration and Login Workflow

Registration	Client send email and password Server verify non-existence and update database Server perform an login by setting session_id
Login	Client send login credential Server verify credential. If user exist, set session_id and render requested resource
Logout	Client submit a logout request Server clear session_id in cookie. No validation needed
Other	Server check session_id in cookie and verify if user exist.

Stretch Topic – Learn at you will

Globally verify user identity in every single route

Send user object to every single page at once

Use global middleware app.use()

Use res.locals to share variable between requests

Access Link here: https://vimeo.com/702193938/e7c454ca91