



PROGRAMAÇÃO IV

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AULA 5 - AGENDA

- O protocolo HTTP é *stateless*
- Cookies
- Sessions
- Exercícios de Fixação

O PROTOCOLO HTTP É *STATELESS*

Já sabemos que o protocolo HTTP é *stateless*, ou seja, não possui estado. Por isso, **não** é possível armazenar um valor (variável) e compartilhá-las entre páginas (JSPs ou Servlets).

MÉTODOS DE PERSISTÊNCIA MAIS COMUNS



Cookies



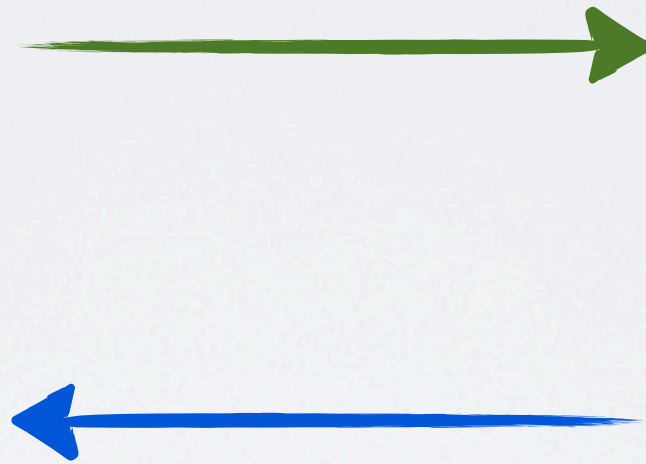
Sessions

COOKIES

OS COOKIES SÃO ARMAZENADOS NO LADO DO CLIENTE (BROWSER)



Cliente



WebServer

Captação da poupança atinge R\$ 19 bi no ano

Elements Resources Network Sources Timeline Profiles Audits Console Rails PageSpeed

IndexedDB

Local Storage

Session Storage

Cookies

www.uol.com.br

googleads.g.doubleclick...

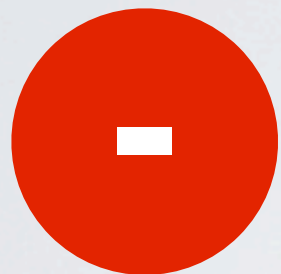
bs.serving-sys.com

s0.2mdn.net

Application Cache

Name	Value	Do...	Path	Expi...	Size	HTTP	Secure
ASP.NET_SessionId	1b2d2r2uqhn2nk555cwmw545	ia.n...	/	Sess...	41	✓	
CSAUOLS	b2UwZnNMWjRvMIBSSXBpTnBVN1VF...	.uol...	/	Thu,...	133	✓	
NGUserID	a8185a2-24741-1094079441-2	bn.u...	/	Wed...	34		
POPhomeUOL	1	.uol...	/	Sess...	11		
POPhomeUOL	0	ww...	/	Sess...	11		
RM240425RM	1	.uol...	/	Fri, ...	11		
RMTRK.ID	b8e19f3b-b8c1-45a0-b737-3cc42f...	.uol...	/	Sat, ...	44		
UOL_ID	D aparecidoprev@uol.com.br 5184...	.uol...	/	Sess...	90		
__gads	ID=5bb35c2404acf4c9:T=1366746...	.uol...	/	Thu,...	75		
drt	OPT_OUT	.dou...	/	Fri, ...	12	✓	
adscol	ip=3377181750&db=13&uid=208...	.ia.n...	/	Fri, ...	41		
geoloc	SA%2CBR%2C27%2CS%E3o%20Jos%E9...	.uol...	/	Tue,...	55		
id	222fcfa65c0100a5 t=1365542296dou...	/	Thu,...	69		
s_pers	%20gpv_pr%3Duol%2520homepage...	.uol...	/	Thu,...	53		
s_sess	%20s_campaign%3Dpag-pagseguro_...	.uol...	/	Sess...	104		
s_vi	[CS]v1 28BAF3FA85013575-400001...	.uol...	/	Sat, ...	48		

COOKIES



**Não são
seguros**



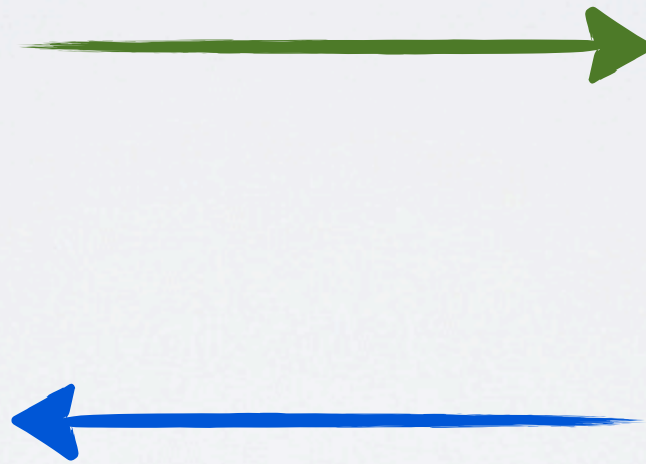
**São
Performáticos**

SESSIONS

AS SESSIONS SÃO ARMazenADAS NO
LADO DO SERVIDOR (WEBSERVER)



Cliente



WebServer

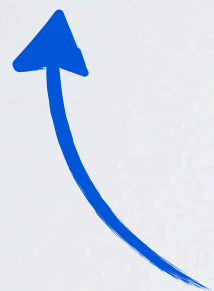
SESSIONS



**Não
Perfomaticas**




**São
Seguras**



Para um site de alto
volume de visitas.

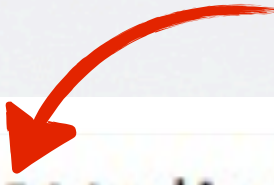
SESSIONS EM SERVLETS

Inicializa (obrigatório)




```
HttpSession session = request.getSession(true);
```

Retornar um valor



```
session.getAttribute("chave")
```

Armazena um valor



```
session.setAttribute("chave", valor);
```

EXEMPLO

```
@WebServlet(urlPatterns = {"/MeuServlet"})
public class MeuServlet extends HttpServlet {
    @Override
    protected void doGet(HttpServletRequest request, HttpServletResponse response)
        throws ServletException, IOException {

        HttpSession session = request.getSession(true);

        response.setContentType("text/html;charset=UTF-8");
        PrintWriter out = response.getWriter();

        try {
            out.println("<!DOCTYPE html>");
            out.println("<html>");
            out.println("<head><title>Formulário Teste de Session</title></head>");
            out.println("<body>");

            out.println("<h1>Formulário Teste de Session</h1>");

            out.println("<h2>Valor da Session atual: " + session.getAttribute("chave") + "</h2>");

            out.println("<form method='post'>");

            out.println("<label for='valor'>Valor:</label>");
            out.println("<input type='text' name='valor' />");
            out.println("<br/>");
            out.println("<input type='submit' />");
            out.println("</form>");

            out.println("</body>");
            out.println("</html>");
        } finally {
            out.close();
        }
    }
}
```


EXEMPLO

```
@Override
protected void doPost(HttpServletRequest request, HttpServletResponse response)
    throws ServletException, IOException {

    HttpSession session = request.getSession(true);

    response.setContentType("text/html;charset=UTF-8");
    PrintWriter out = response.getWriter();

    String valor = request.getParameter("valor");

    session.setAttribute("chave", valor);

    response.setContentType("text/html;charset=UTF-8");

    out.println("<html><body>");
    out.println("<h1>Valor da Session: " + session.getAttribute("chave") + "</h1>");
    out.println("</body></html>");
}
```


EXEMPLO



A screenshot of a web browser window. The address bar shows the URL `localhost:8084/WebApplication1/MeuServlet`. The browser's tab bar shows several tabs, including "The Toolbox...s and apps", "Domainr: fas...registration", and "Speaker". The main content area displays the title "Formulário Teste de Session" in a large, bold, black serif font. Below the title, the text "Valor da Session atual: null" is displayed in a bold, black serif font. The word "null" is circled in red. Below this text, there is a label "Valor:" followed by an empty text input field. Below the input field is a button labeled "Enviar".

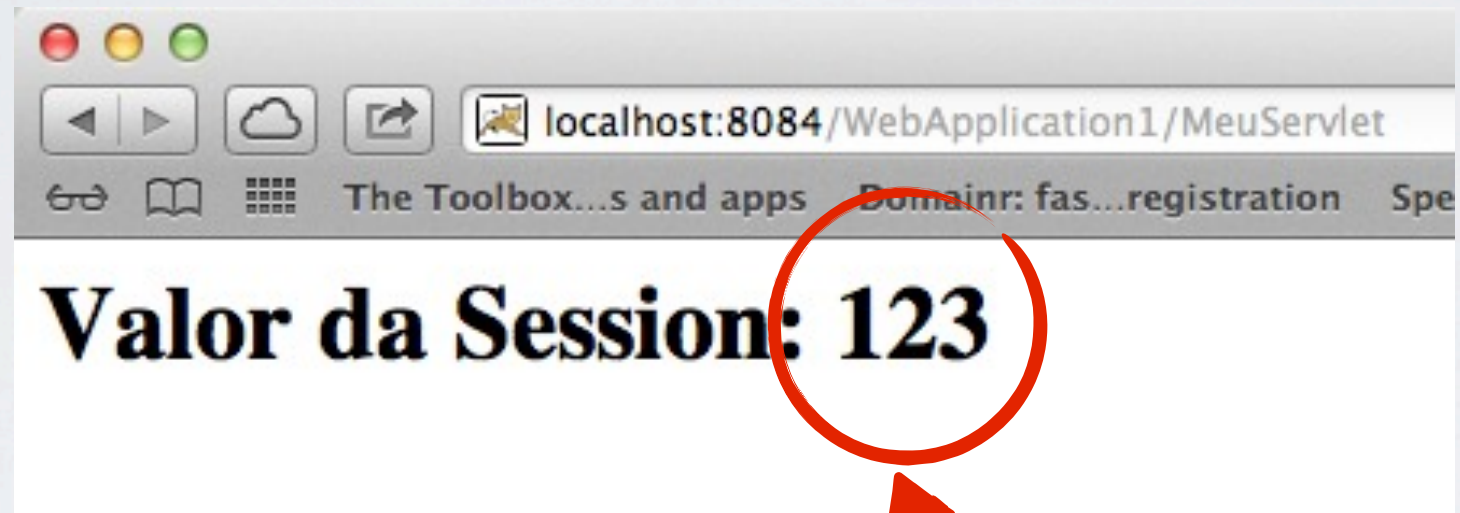
Formulário Teste de Session

Valor da Session atual: null

Valor:

Enviar

EXEMPLO



Valor definido

EXEMPLO

Servlet 2



```
@WebServlet(urlPatterns = {"/MeuServlet2"})
public class MeuServlet2 extends HttpServlet {
    @Override
    protected void doGet(HttpServletRequest request, HttpServletResponse response)
        throws ServletException, IOException {

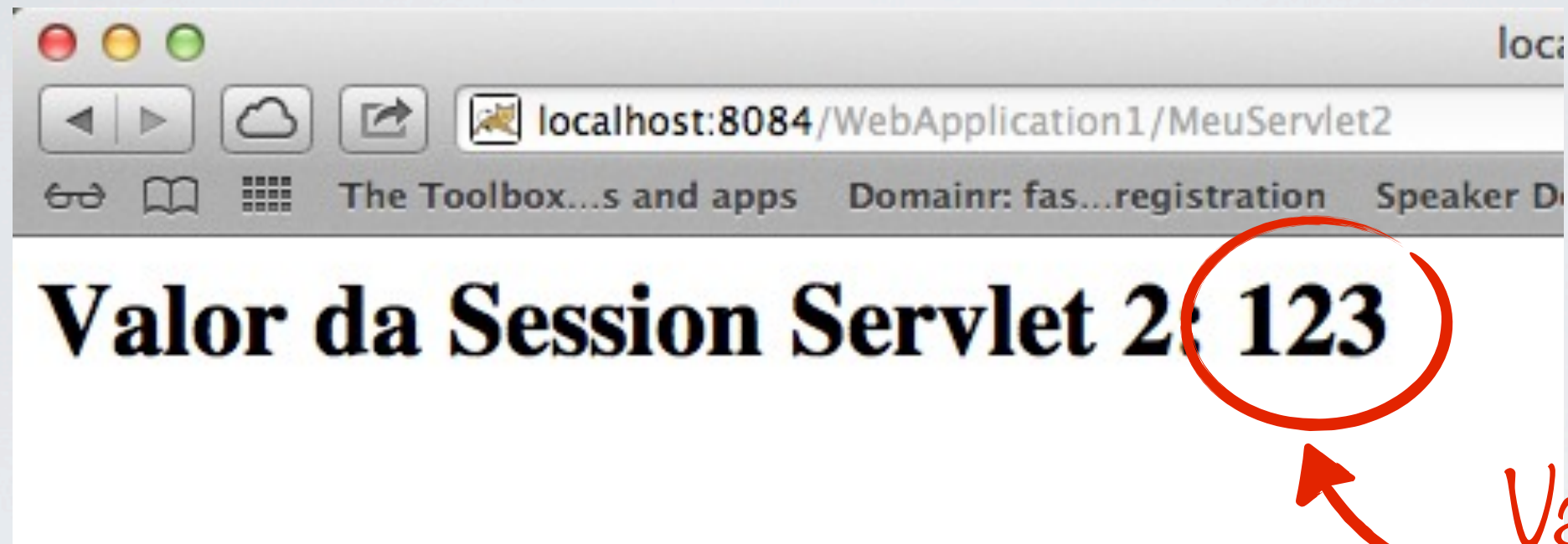
        HttpSession session = request.getSession(true);

        response.setContentType("text/html;charset=UTF-8");
        PrintWriter out = response.getWriter();

        response.setContentType("text/html;charset=UTF-8");

        out.println("<html><body>");
        out.println("<h1>Valor da Session Servlet 2: " + session.getAttribute("chave") + "</h1>");
        out.println("</body></html>");
    }
}
```


EXEMPLO



Valor definido
na Servlet 1