

JEE Course Servlets – Cookies

Márcio Fuckner

HvA – Hogeschool van Amsterdam



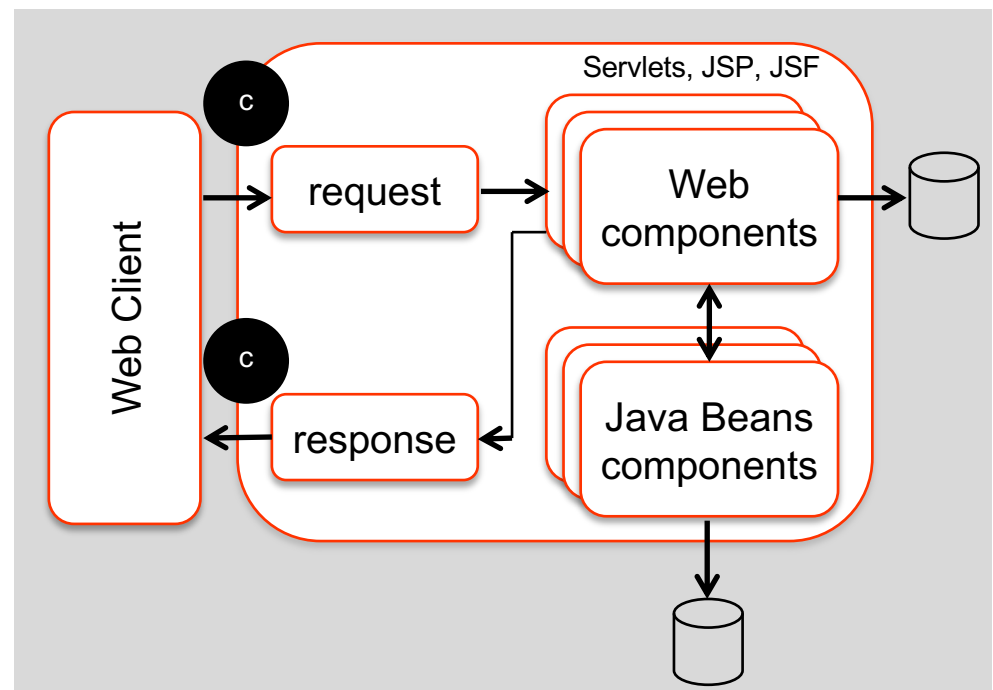
Content

- ▶ Cookie definition and usages
- ▶ How to create Cookies?
- ▶ How to retrieve Cookies?



Cookie definition

- ▶ Cookies are small sequences of bytes stored on the **client side**.
- ▶ They have first proposed by Netscape to store persistent data
- ▶ There are some restrictions on their usage:
 - ▶ A Cookie can only be accessed by the domain that has created it
 - ▶ In general, browsers allow disabling Cookies (privacy)
- ▶ Cookies are sent back (as headers) each time she returns to the server who recorded them.





Cookie usages

- ▶ The most common uses of cookies are:
 - ▶ Storing useful data to reduce the amount of work to fulfill forms
 - ▶ Site personalization
 - ▶ Session tracking
- ▶ Cookies do not represent a safety issue to the user. They main concerning is related to privacy.



Creating Cookies (1 of 2)

- ▶ To create a cookie you must:
 - ▶ Create a *Cookie* object informing the key and value as Strings
 - ▶ Set the cookie expiration time (in seconds) using the *setMaxAge* method. If no time is specified, the cookie is valid until the browser is closed
 - ▶ Send the cookie to the client using the *HttpServletResponse.addCookie* method



Creating Cookies (2 of 2)

- ▶ Some rules:
 - ▶ The cookie name can not contain special characters:
[] () = "/? @:;
 - ▶ The cookie content can not contain semicolons
 - ▶ You can also create cookies by entering the appropriate headers in the response object.



Retrieving Cookies

- ▶ Browsers always send all cookies that belong to the domain during the request
- ▶ Cookies are embedded in the request message as headers
- ▶ You can retrieve them using *getCookies*
- ▶ To retrieve a specific cookie, you should iterate over the returning array, comparing the name using the *cookie.getName* method (brute force!)



Some Cookie methods

- ▶ set/getName Ex.: setName("prefFolder")
- ▶ set/getValue Ex.: setValue("/usr/files")
- ▶ set/getMaxAge Ex.: setMaxAge(60 * 60)
- ▶ set/getSecure Ex.: setSecure(true)
- ▶ set/getDomain Ex: setDomain("fun.acme.com")
- ▶ set/getPath Ex: setPath("/")



Further reading

HttpServletResponse interface

<http://tomcat.apache.org/tomcat-8.0-doc/servletapi/javax/servlet/http/Cookie.html>