Last update: 3/9/2016

Quiz answers for State Management lesson

1. Can post requests be bookmarked? What are the problems?

They can be bookmarked, but only the url is saved. Any form input parameters that would be included in the body are lost, so the request might not work as expected from the bookmark.

1. What is the purpose of request dispatching?

Answer:

|  |
| --- |
| 1. to reuse functionality 2. separate logic + templating (servlet + JSP) 3. to separate responsibilities |

1. What is the difference between redirect and request dispatch?

ANSWER: request dispatch (forward) happens entirely on the server side. The client is unaware of the forward. Redirect involves an extra roundtrip to the client to tell it to make a request to a new URL. This updates the address bar of the browser. Forward can pass along the HTTPrequest and HTTPresponse Java objects to another servlet on the server.

4 What is an attribute ?

Answer:

|  |
| --- |
| name/value pair in a scope  An attribute( container attribute) is an object set(bound) into one of three other servlet API objects( which are ServletContext, HttpServletRequest and HttpSession.  It has a return type of object and needs to be cast to an appropriate subtype on retrieval. |

6 What is the difference between attributes and parameters?

Answer:

|  |
| --- |
| Attributes: are container attributes, they have 3 scopes.It is possible to set them using setAttribute(String name, Object value). They have return type of Object and need to be cast and use method getAttribute(String name).  where as  Parameters are inputs from form and always String type. Uses getParameter and getParameterValue methods. |

6 What are dangers of using attributes?

Answer:

|  |
| --- |
| shared resources - need to synchronize context or session values if there is any concern about race conditions |

8 What does it mean to say that http is stateless? Give an example of a stateful protocol.

Answer:

|  |
| --- |
| No memory is retained between messages. TCP is a stateful protocol |

12 Give 5 different methods for maintaining state information (count each attribute scope as one method)

Answer:

|  |
| --- |
| request scope session scope application scope cookies hidden fields on a form |

11 How long does a session last?

Answer:

|  |
| --- |
| Until the session object times out (seconds pass without any use) or until session.invalidate() is called or when application is undeployed. |

12 What is a cookie, and how long does a cookie last?

Answer:

|  |
| --- |
| Name/value pair of strings sent as a message header to/from server depends on settings - can be temporary (after brower is closed) or permanent (live until expired) |

13. What is the purpose of URL rewriting?

This is a way for containers to support sessions even if cookies are turned off in a browser. Rather than sending the session id in the Cookie-set header, the container will send it as part of the URL. (the same term is now often used to describe techniques for making urls easier to read by humans in the browser address bar—e.g., “pretty urls”)

14. Why does the request attribute report ‘null’ for the maintaining state demo?  
Answer: Because request attributes are always reset when a new request is made.