**State Management Quiz**

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

Ans: Yes the post request can be bookmarked but there is no meaning of doing it because bookmark only consist of URL and all the form parameters will be lost and web server will not know what to do with since it will be expecting some parameters. This happens because post request does not contains parameters in the URL. Only in get request form parameter are shown in URL.

**2. What is the purpose of request dispatching?**

Ans: The purpose of request dispatching is to dispatch the request to another resource it may be html, servlet or JSP pages.

**3. What is the difference between redirect and request dispatch?**

Ans: **Dispatch (forward)**

1. When we use dispatch, request is transfer to other resource within the same server for further processing.

2. In case of dispatch, web container handle all process internally and client or browser is not involved.

3. During request dispatch requestdispatcher object we pass request and response objects so our old request object is present on new resource which is going to process our request.

4. Visually we are not able to see the forwarded address, it is transparent.

5. request is faster then send redirect.

**Redirect**

1. In case of sendRedirect, request is transfer to another resource to different domain or different server for further processing.

2. When you use sendRedirect, container transfers the request to client or browser so URL given inside the sendRedirect method is visible as a new request to the client.

3. In case of sendRedirect call, old request and response objects are lost because it’s treated as new request by the browser.

4. In address bar, we are able to see the new redirected address. It’s not transparent.

5. sendRedirect is slower because one extra round trip is required, because completely new request is created and old request object is lost. Two browser request required.

**4. What is an attribute ?**

Ans: An attribute in servlet is an object that can be set, get or removed from one of the following scopes:

request scope

session scope

application scope

The servlet programmer can pass informations from one servlet to another using attributes. It is just like passing object from one class to another so that we can reuse the same object again and again.

**5.What is the difference between attributes and parameters?**

Ans: The main difference is that Parameters come from the client request.

Attributes are set by the server side.

**6. What are dangers of using attributes?**

Context level attributes are dangerous because they are global level attributes and are shared by every servlet and every request in the application. Thus they are not considered to be thread safe. Only the request attributes are thread safe.

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

HTTP is a stateless protocol because it cannot remember the session information or status for its duration of requests. The Connection between the server and the browser is lost as the connection ends. TCP is an example of a stateful protocol.

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

The five different methods for maintaining state information are :

Request Scope

Session Scope

Application Scope

Cookies

Hidden fields

How long does a session last?

A session lasts until the browser is closed or until the user has logged out of the application.

**9.What is a cookie, and how long does a cookie last?**

A cookie is a small piece of data sent by the server and stored in the browser. Cookies last according to the type.Temporary cookies last till the lifetime of the browser whereas permanent cookies last till its max set age.

**10.What is the purpose of URL rewriting?**

URl rewriting is a way to support anonymous session tracking since using URL rewriting dynamically modifies the local URL to contain some extra information.

**11.Why does the request attribute report ‘null’ for the maintaining state demo?**

The request attribute reports 'null' for the maintaining state demo because local attribute requestState is not transferred to the post.