

State Management Quiz

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

Post request can't be bookmarked, the problem is, the URL for post request is always encrypted and the parameters are not visible in the browser bar, so we cannot able to bookmark the URL.

2. What is the purpose of request dispatching?

The purpose of request dispatcher is to forward a request from the servlet to another resource (Servlet, JSP file, or HTML file on the server) or to include the content of a resource (servlet, JSP page, HTML file) in the response.

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

The main difference between a redirection and a request dispatching is that, redirection makes the client(browser) create a new request to get to the resource, the user can see the new URL while request dispatch get the resource in same request and URL does not changes.

Also, another very important difference is that, `sendRedirect()` works on response object while request dispatch work on request object.

4. What is an attribute?

An **attribute** is an object that is used to share information in a web app. Attribute allows Servlets to share information among themselves. Attributes can be SET and GET from one of the following scopes:

1. request
2. session
3. application

5. What is the difference between attributes and parameters?

Ans:

Attributes are objects on the server. They promote communication between components. Whereas Input parameters are text that must be accessed and converted by a servlet. This is the main mechanism web apps use to send information from the browser to the server.

6. What are dangers of using attributes?

The problem using attributes is it's not thread safe in the global scope.

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

HTTP is a stateless protocol, which means that after a web server responds to a request, there is no "memory" of the request or who sent it. means the client and server are aware of each other during a current request only. Afterwards, both of them forget each other.

Some examples of stateful protocols are, Transmission Control Protocol (TCP) and Border Gateway Protocol (BGP).

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

The 5 different methods for maintaining state information are: -

1. request scope: destroyed when servlet finishes processing request
2. session scope: destroyed when user closes browser
3. application scope destroyed when Container stopped.
4. Cookies saved on browser, temporary (deleted when the browser closes) permanent
5. Hidden fields on a form

9. How long does a session last?

A session lasts until its invalidated or until the settled value is over.

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

A **cookie** is a small piece of information that is persisted between the multiple client requests.

There are 2 types of cookies in servlets.

1. Temporary cookie
2. Permanent cookie

- ☐ Temporary cookie

It is **valid for single session** only. It is removed each time when user closes the browser.

- Permanent cookie

It is **valid for multiple session**. It is not removed each time when user closes the browser. It is removed only if user logout or sign-out.

11. What is the purpose of URL rewriting?

The purpose of URL Rewriting is, If the client has disabled cookies in the browser then session management using cookie won't work. In that case **URL Rewriting** can be used as a backup. **URL rewriting** will always work.

12. Why does the request attribute report 'null' for the maintaining state demo?

The reason for the request attribute to be null for the maintaining state demo is, the request scope always destroyed when servlet finishes processing request.