**State Management Quiz Answers**

1, When we bookmark a page it takes only the URL and incase of GET method it gets all the information since parameters are sent with the URL so can GET operations when bookmarked always give the same result. POST operations can be bookmarked but since their parameters and exact requests are not in the URL it's not guaranteed to give the same response.

2, Request dispatcher allows a servlet to redirect/forward the request into any other resource in the server. It can also allow a response to include another servlets answer.

3, In case of a request the URL changes and an HTTP 3\*\* message is sent to the client and only a message is passed and not the (request, response) objects. But in the case of request dispatcher for forwarding the URL is not changed and browser is not aware of the changes. And the response, request objects are transferred together.

4, An attribute is an object that allows servlets to exchange information by using SET and GET methods.

5, parameters are values passed in to servlets which are only String objects and cannot be modified, while attributes of any kind which can be modified by the servlet to be edited deleted and passed.

6, Attributes are not thread safe so it might cause inappropriate behaviors while accessing them if its not handled well. So if we have a direct access to the request parameters directly we should use parameters unless we need it for forwarding and redirecting

7, HTTP is a stateless protocol because the connection between the server and the client once is lost once the request is completed and the it has no way of knowing what request came before it also. Because in its simple/normal form HTTP is a simple transfer protocol.

For example - Browser requests a specific file or HTML from the server

- Server responds with a specific file/HTML needed from the request

- connection is closed and another new request is executed

8, - Session Tracking by creating new sessions

- keeping track by creating cookie

- URL Mapping

- Hidden names field variable

9, Session after it has been created lasts until the time we have set in the seMaxInactiveInterval(int interval) then when the time ends the session will be closed or until the client closes the browser or session will not expire if it has just been created and still running.

10, Default cookie/temporary cookie lasts until the browser is closed but if we have permanent cookies then if the browser allowed cookies to be stored it will be stored till that time. We use SetMaxAge(minutes) to set the max age of our cookies

11, Purpose of URL Rewriting is that it is another way of managing state in servlets where if cookies are disabled on a browser we can send a certain name and its value in to another servlet to make sure the request came from an existing user and not a new one.

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