State Management Quiz

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

A post cannot be bookmarked. Attempting to bookmark a post will just result in a get operation on the URL. Get requests are supposed to be idempotent i.e. making the same get request numerous times should result in the same response. Post requests on the other hand are not.

1. What is the purpose of request dispatching?

Request dispatching is used to define an object which can dispatch the request to any resources on the server.

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

Redirect stops further processing of the request and send a URL of the location to be redirected to the client browser in the response header. Server does not have control of this request after sending the URL to the client browser. Client browser sends a new request to the new URL and it will be processed by the server as another normal request. On the other hand, request dispatch passes the control of the request to another servlet or jsp without telling anything about the request dispatch to the client browser. Therefore client browser don't know whether the returned resource is from another servlet/jsp or not. Therefore request dispatch happens completely in the server side. But sendRedirect is handle through the client browser.

1. What is an attribute?

It’s an object bound into one of the three servlet API objects: HttpServletRequest, HttpSession, ServletContext.

1. What is the difference between attributes and parameters?

Attributes are objects that are attached to various scopes and can be modified, retrieved or removed. Parameters may come into our application from the client request, or may be configured through deployment descriptor (web.xml) elements or their corresponding annotations.

1. What are dangers of using attributes?

They are global and shared by every servlet and every request in the application. They are not thread safe.

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

It means that after a web server responds to a request, there will be no memory of the request or who sent it. HTTP is stateless. FTP is an example for a stateful protocol.

1. Give 5 different methods for maintaining state information (count each attribute scope as one method).
2. Request scope: destroyed when servlet finishes processing request.
3. Session scope: destroyed when user closes browser.
4. Application scope: destroyed when Container stopped.
5. Cookies saved on browser (either temporary or permanent).
6. Hidden fields on a form.
7. How long does a session last?

30 minutes by default. But the limit can be adjusted so a session lasts from a few seconds to several hours.

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

Cookies are messages that web servers pass to the web. The browser stores each message in a small text file, called cookie. When another page is requested from the server, the browser sends the cookie back to the server.

1. What is the purpose of URL rewriting?

To help with user access and site visibility.

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

Because the doPost method is not maintaining the state. Only the doGet has means of maintaining it.