

## Homework Assignment 3 (25 Questions: Answers)

(Due 12/6/2019 Fri)

Name: \_\_\_\_\_

1. Which of the following types of protocols does the HTTP protocol belong to?  
(a) ☒ stateless    (b)    stateful
2. In a web application, sometimes we may want to use a JavaScript function to modify a parameter value before we send it to the server. In the following two ways to pass the data, which way is better for our purpose?  
(a) ☒ store data in a hidden field    (b)    store data in a session object
3. In order to write some *logging* messages when servlets and JSPs are called in a Java web application, we have to write the *logging* code in *each* of those servlets and JSPs.  
(a)    true    (b) ☒ false
4. When we use filters in a Java web application, which of the following gives the way we use them in general?  
(a)    intercept the requests only    (b)    intercept the responses only  
(c) ☒ intercept both the requests and responses
5. Assume that we put a filter chain before a servlet. Every time when we request this servlet, we need to go through this filter chain. No matter what happens, we will eventually reach this servlet.  
(a)    true    (b) ☒ false
6. In Java web application, there is a technology called AOP - *Aspect Oriented Programming*. What is the meaning of the *aspect* here?  
(a) ☒ a cross-cutting concern    (b)    a reusable business object  
(c)    a data access object    (d)    a design pattern
7. When we use the `getSession()` method of the `HttpSession` object to create a session object, which of the following versions is it equivalent to?  
(a) ☒ `getSession(true)`    (b)    `getSession(false)`

8. In which of the following places is the session object stored?
- (a) a client machine    (b) ✓ the server
9. In a Java web application, every session object must be associated with a unique session ID.
- (a) ✓ true    (b) false
10. In a Java web application, different users can share the same session object.
- (a) true    (b) ✓ false
11. It is a good idea to make the HTTP protocol stateful.
- (a) true    (b) ✓ false
12. As soon as a session ID is created for a user, every time the user sends a request to the same web application, the session ID is contained in the request.
- (a) ✓ true    (b) false
13. In a JSP, in order to set a session attribute, you have to use a scriptlet with the `session` implicit object.
- (a) true    (b) ✓ false
14. A web site with high-security concern can use the cookies to store the username and password of a user.
- (a) true    (b) ✓ false
15. In a Java web application, is it possible to apply a filter on all the JSP files but not on any servlet?
- (a) ✓ yes    (b) no
16. When a web application uses cookies, if a user closes the browser, all the cookies created by this web application disappear immediately all the time.
- (a) true    (b) ✓ false

17. In a servlet, is it possible that we remove only one of the attributes from the session without destroying the entire session object?
- (a) ☒ yes    (b) ☐ no
18. A web browser can store unlimited number of cookies on the user's machine.
- (a) ☐ true    (b) ☒ false
19. Servers running on different domains can access the same cookie.
- (a) ☐ true    (b) ☒ false
20. In Java, is it possible to apply a *cross-cutting concern* to a method inside a Java class?
- (a) ☒ yes    (b) ☐ no
21. Every filter chain in a web application must be executed from the beginning to end.
- (a) ☐ true    (b) ☒ false
22. By default, the servlet API uses the URL rewriting to send the session ID to the user.
- (a) ☐ true    (b) ☒ false
23. Which of the following ways do we use to configure a filter?
- (a) ☒ in the `web.xml` file    (b) ☐ in individual filter using some annotation
24. Is it possible to store a large amount of data in a cookie?
- (a) ☐ yes    (b) ☒ no
25. In a servlet, we want to check if a session attribute exists in the session or not. If the session object does not exist, we do not need to create it. Assume that `request` is the `HttpServletRequest` object. Which of the following ways is the *best* to get the session object in this situation?
- (a) `HttpSession session = request.getSession();`  
(b) `HttpSession session = request.getSession(true);`  
(c) ☒ `HttpSession session = request.getSession(false);`