

Servlet JSP- Assignment

1. What is web application or client / server architecture?

A web application is a software application that runs on a web server and can be accessed through a web browser. It typically consists of: Front-End, Back-End, Database.

2. What is a Servlet?

TO used to extend the capabilities of servers that host applications accessed via a request-response programming model. Although servlets can respond to any type of request, they are commonly used to extend applications hosted by web servers.

3. How PrintWriter works?

It provides methods to write formatted representations of objects to a text-output stream. This class is particularly useful for writing characters to files, network connections, or other output destinations.

4. What is servlet architecture?

By understanding the components, lifecycle, and workings of servlets, developers can create efficient, scalable, and maintainable web applications. The servlet container handles the complexity of managing servlets, allowing developers to focus on implementing business logic and generating dynamic content for clients.

5. What are life cycle methods of Servlet?

init, service, destroy.

6. What is difference between doGet and doPost()?

doGet: Retrieve

doPost: Submit

7. When does destroy get called?

The destroy method is called when the servlet is being taken out of service. This happens when the servlet container is shutting down or when the servlet is being undeployed or reloaded.

8. What are ways to. Implements servlet ?

Extend the HttpServlet class and override the doGet and doPost methods.

Implement the Servlet interface and define the init, service, and destroy methods.

9. What are http methods?

HTTP methods are actions used by clients to interact with web servers; they include GET, POST, PUT, DELETE, and more for various tasks like retrieval, submission, updating, and deletion of resources.

10. What http method used by Servlet?

Servlets typically use the HTTP methods GET and POST to handle client requests and perform actions such as retrieving data (GET) and submitting data (POST) to the server.

11. What is difference between Generic Servlet and HttpServlet?

The main difference is that GenericServlet is protocol-independent and serves as a base class for all servlets, while HttpServlet specifically handles HTTP protocol-related tasks and provides methods like doGet and doPost for handling HTTP GET and POST requests.

12. What is the use of RequestDispatcher Interface?

The Request Dispatcher interface in Java Servlets is used to forward requests or include responses from one servlet to another servlet or a JSP (JavaServer Pages) within the same application context.

13. What is the difference between ServletConfig and ServletContext?

ServletConfig is per servlet, providing configuration for a specific servlet instance, while ServletContext is per web application, providing configuration shared among all servlets in the application.

14. What do you mean by InterServlet communication?

InterServlet communication refers to the exchange of data or control between servlets within the same web application context.

15. What is significance of web.xml?

The web.xml file is significant as it serves as the deployment descriptor for Java web applications, configuring servlets, filters, mappings, and other settings required by the servlet container.

16. Explain Web Container?

A web container, also known as a servlet container, manages the execution of servlets and provides runtime environments for Java-based web applications.

17. What do you mean by the Servlet Chaining?

Servlet chaining refers to the process where multiple servlets collaborate to process a client request, enabling modular and sequential processing of requests and responses.

18. Why do we use sendRedirect() method?

We use sendRedirect() method in servlets to redirect the client to a different resource (such as another servlet, JSP, or HTML page) with a new URL.

19. What Servlet filters?

Servlet filters are Java components that intercept and manipulate requests and responses before they reach the servlet or after they leave, providing functionalities such as logging, authentication, and data transformation.

20. When to use Servlet filter?

Use Servlet filters when you need to apply common functionality across multiple servlets in a web application, such as authentication, logging, data compression, or URL rewriting.

21. How do we translate JSP?

JSP (JavaServer Pages) are translated into servlets by the web container during the application deployment process.

22. What is JSP ?

JSP (JavaServer Pages) is a technology used for creating dynamic web content with Java by embedding Java code within HTML pages.

23. Why do you use JSP?

JSP allows for the separation of dynamic content generation (Java code) and presentation (HTML), enhancing maintainability and development efficiency in web applications.

24. What are implicit object in JSP?

Implicit objects in JSP are predefined objects that provide easy access to request, response, session, application, page context, and other elements within a JSP page.

25. What are scriptlet in JSP?

Scriptlets in JSP are blocks of Java code embedded within `<% %>` tags that execute when the JSP page is processed on the server, allowing dynamic content generation.

26. What are directive?

Directives in JSP (`<%@ directive %>` tags) provide instructions to the JSP container for configuration settings, importing classes, or defining error handling pages.

27. How to execute Java code in JSP?

Java code in JSP is executed within `<% %>` scriptlet tags or using expression `<%= %>` and declaration `<%! %>` tags.

28. Why jsp is in when Servlet can do everything what jsp can do?

JSP is preferred for rapid development and easy integration of dynamic content with HTML, whereas servlets are more suited for complex processing and business logic separation.

29. What is lifecycle phases of JSP?

JSP lifecycle phases include translation into servlet, initialization, execution, and destruction of the servlet instance.

30. What are the method used here?

Methods commonly used include `doGet()` and `doPost()` in servlets for handling HTTP requests, and JSP uses lifecycle methods like `init()`, `service()`, and `destroy()` for servlet processing.