

Assignment-4

(Servlet)

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

Answer:- Web application, or client/server architecture for the web, refers to the structure where a client (web browser) interacts with a server over a network. The client handles user interface and presentation, while the server manages business logic, database operations, and responds to client requests.

2. What is a Servlet?

Answer:- A servlet is a Java program that extends the capabilities of a server. It provides a way to create web applications by dynamically generating web content. Servlets run on the server side, handling requests from clients (web browsers) and generating responses based on those requests.

3. How PrintWriter works?

Answer:- Printwriter is a class which converts the primitive data(int , float , char , etc.) into the text format. which we want to show as a response to the client's browser.

4. What is servlet architecture?

Answer:-

- Web browser sends the request to the web server.
- Web server receives the request and sends it to the servlet containers, there could be more than one container.
- Servlet receives the request and process the request, complete the essential business logic.
- If needed, request query forward to database and receive the outcome and sends the response object back to the web server.
- Web server sends the response back to the client.

5. What are life cycle methods of Servlet?

Answer:-

- **init()** : Initialization.
- **service()** : Request handling.
- **destroy()** : Cleanup.

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

Answer:-

- doGet: 1 . Used for retrieving data. 2. Parameters are sent in the URL.
3. Should not change server state.

dopost: 1. Used for submitting data to the server. 2. Parameters are sent in the request body.
3. Suitable for operations that modify server state.

7. When does destroy get called?

Answer:- destroy() Method only called once servlet container has done with his work done.

8. What are ways to. Implements servlet?

Answer:-

By implementing servlet Interface

By inheriting GenericServlet class

By inheriting HttpServlet class

9. What are http methods?

Avaneesh:- get, put, post, delete, head, options, patch.

10. What http method used by Servlet?

Answer:- get, post

11. What is difference between Generic Servlet and HttpServlet?

Answer:-

Generic Servlet is parent class of HttpServlet.

GenericServlet allow to use any protocol, HttpServlet only use http.

GenericServlet has service() and HttpServlet has doGet(), doPost()

GenericServlet not used frequently, HttpServlet used in project base.

12. What is the use of RequestDispatcher Interface?

Answer:- The Request Dispatcher interface in Java Servlets provides a way to forward a request from one servlet to another servlet or include the content of another servlet within the response.

13. What is the difference between ServletConfig and ServletContext?

Answer:- ServletConfig used for make available data accessible in Servlet level.

ServletContext used for make available data accessible in Application level.

14. What do you mean by InterServlet communication?

Answer-: Servlets running together in the same server have several ways to communicate with each other. Here we use requestDispatcher Interface for communication.

15. What is significance of web.xml?

Answer-: It is deployment descriptor file of Servlet Container.

16. Explain Web Container?

Answer-: A web container, also known as a servlet container or servlet engine, is a runtime environment within a web server that manages the execution of servlets and JavaServer Pages (JSP).

17. What do you mean by the Servlet Chaining?

Answer-: Servlet chaining is just used to describe the process where a servlet will complete its own businesswork and then hand off processing to another servlet.

18. Why do we use sendRedirect() method?

Answer-: sendRedirect used to send a new request inside or outside of the server, that works at client Side.

19. What Servlet filters?

Answer-: A Servlet filter is an object that used to filter the request before hitting the server.

20. When to use Servlet filter?

Answer-: A Servlet filter acts as intermediaries, allowing processing of requests and responses before reaching the servlet or after leaving it.

JSP

21. How do we translate JSP?

Answer-: JSP translators It is process of converting jsp to Java code, equivalent Servlet and then generating classfile of the Servlet.

22. What is JSP ?

Answer-: JSP technology is used to create web application just like Servlet technology. A JSP page consists of HTML tags and JSP tags.

23. Why do you use JSP?

Answer-: JSP is a technology for developing Webpages that supports dynamic content. It helps to insert javacode in HTML pages by making use of special JSP tags called scriptlet.

24. What are implicit object in JSP?

Answer-: Implicit objects in JSP are predefined variables provided by the JSP container for easy access to commonly used objects and information within JSP pages. Examples include request, response, out, exception, session, application, config, pageContext, and page.

25. What are scriptlet in JSP?

Answer-: Scriptlets in JSP are blocks of Java code embedded within `<% %>` tags, allowing dynamic server-side logic directly within the HTML structure of a JSP page.

26. What are directive?

Answer-: The jsp directives are messages that tells the web container how to translate a JSP page into the corresponding servlet.

27. How to execute Java code in JSP?

Answer-: The tags used to execute Java code in JSP are:

1. Scriptlet : `<% Java code %>`
2. Expression : `<%= expression %>`
3. Declaration : `<%! Java code %>`

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

Answer-: JSP is easy to code as it is combination of html and jsp tags and it supports only http requests.

29. What is lifecycle phases of JSP

Answer-: • Translation

- Compilation
- Initialization
- Request Processing
- Destruction

30. What are the method used here?

Answer-: jspInit() ,jspService(), jspDestroy()