**Java Interview Question Bank**

**Fresher Academy**

**JSP/SERVLET**

1. **What is JSP and why do we need it?**

* JSP stands for JavaServer Pages. JSP is java server side technology to create dynamic web pages.
* JSP is extension of Servlet technology to help developers create dynamic pages with HTML like syntax.

1. **What are the JSP lifecycle phases?**

* Translation
* Compilation
* Class Loading
* Instantiation
* Initialization
* Request Processing
* Destroy.

1. **What are JSP lifecycle methods?**

* jspInit()
* \_jspService()
* jspDestroy()

1. **What is JSP Expression Language and what are it’s benefits?**

* We can use scriptlets and JSP expressions to retrieve attributes and parameters in JSP with java code and use it for view purpose.
* But for web designers, java code is hard to understand and that’s why JSP Specs 2.0 introduced Expression Language (EL) through which we can get attributes and parameters easily using HTML like tags.
* Expression language syntax is ${name}.

1. **What is JSP Standard Tag Library (JSTL), provide some example usage?**

* JSTL is part of the Java EE API and included in most servlet containers. But to use JSTL in our JSP pages, we need to download the JSTL jars for your servlet container.
* JSP Standard Tag Library or JSTL is more versatile than JSP EL or Action elements because we can loop through a collection or escape HTML tags to show them like text in response.

1. What are JSP Directives?

* <%@ page %>
* <%% import %>
* <%@ taglib %>

1. What are JSP actions?

* <jsp: include />
* <jsp: useBean />
* <jsp: forward />

1. **What is the difference between GET and POST method?**

* **GET:**
  + GET is less secure compared to POST because data sent is part of the URL. Never use GET when sending passwords or other sensitive information.
  + Data is visible to everyone in the URL.
  + Only ASCII characters allowed.
  + maximum URL length is 2048 characters.
* **POST**:
  + POST is a little safer than GET because the parameters are not stored in browser history or in web server logs
  + Data is not displayed in the URL.
  + No restrictions on data type. Binary data is also allowed.
  + No restrictions on data length.

1. **What is the main difference between a Session and Cookie in JSP?**

* A Session is always stored at the Server side. In JSP, session is a built-in object in JSP container. The session object is an instance of javax.servlet.http.HttpSession and is used to track client session between client requests
* A Cookie is always stored at the client side. Cookies are text files stored on the client computer and they are kept for various information tracking purpose.

1. How can you delete a session data?

* Remove a particular attribute
* Delete the whole session
* Setting Session timeout
* Log the user out
* web.xml Configuration

1. What is a servlet?
2. Application, Request, Session And Page Scopes in Servlets and Jsps
3. What are common tasks performed by Servlet Container?
4. What is ServletConfig object?
5. What is ServletContext object?
6. What is difference between ServletConfig and ServletContext?
7. What is difference between PrintWriter and ServletOutputStream?
8. Can we get PrintWriter and ServletOutputStream both in a servlet?
9. Do we need to override service() method?
10. Is it good idea to create servlet constructor?
11. What is difference between GenericServlet and HttpServlet?
12. What is servlet attributes and their scope?
13. How do we call one servlet from another servlet?
14. How can we invoke another servlet in a different application?
15. What is difference between ServletResponse sendRedirect() and RequestDispatcher forward() method?
16. Why HttpServlet class is declared abstract?
17. What are the phases of servlet life cycle?
18. What are life cycle methods of a servlet?
19. why we should override only no-agrs init() method.
20. What is URL Encoding?
21. What are different methods of session management in servlets?
22. What is URL Rewriting?
23. How does Cookies work in Servlets?
24. How to notify an object in session when session is invalidated or timed-out?
25. What is the difference between encodeRedirectUrl and encodeURL?
26. Why do we have servlet filters?
27. What is the effective way to make sure all the servlets are accessible only when user has a valid session?
28. Why do we have servlet listeners?
29. How to handle exceptions thrown by application with another servlet?
30. What is a deployment descriptor?
31. Write a servlet to upload file on server.
32. How do we go with database connection and log4j integration in servlet?
33. What are important features of Servlet 3?
34. What are different ways for servlet authentication?
35. What is the **Web Filter**? **Servlet Filter**?

* Filters are compontents that you can use and configure to perform some filtering tasks.
* Filter is used for pre-processing of requests and post-processing of responses.
* For creating a filter in servlet, we must implement **Filter** interface. Filter interface gives the following life cycle methods for a filter:
  + init()
  + doFilter()
  + destroy()