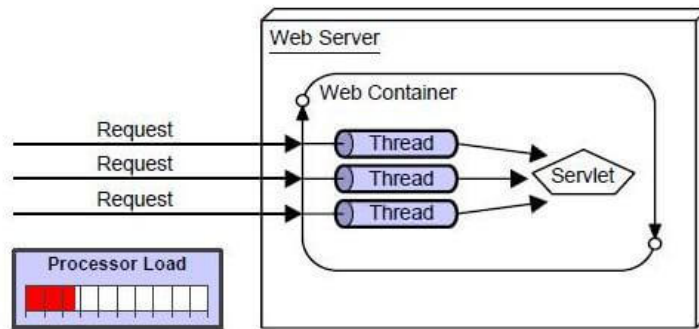


# Servlet & JSP Interview Questions

- **How many Objects of servlet are created?**

- Only one object per servlet is created, for each request web container provides one thread to that servlet object. (Web Container is responsible for creation of servlet object)



- **When this object of servlet is created?**

- By default the object of servlet is created when the first request is made to it( so the first request takes a little more time than the subsequent ones) so if we use load on startup in our deployment descriptor, the servlet could be created on startup. we pass integers in load-on-startup, if value of this integer is negative then object wont be created on startup but when the first request will be made. If value is positive then servlet objects will be created in ascending order of values ie. servlet with lower load-on-startup will be loaded first.

- **What is the Life-cycle of servlet/ life cycle methods of servlets?**

- Init(servletconfig config) :It is invoked only once when first request comes for the servlet. It is used to initialize the servlet.
- service(servletrequest, servletresponse) :It is invoked at each request.The service() method is used to service the request.
- destroy():It is invoked only once when servlet is unloaded.

- **What are the ways of servlet collaboration ?**

- There are two ways of servlet collaboration

- RequestDispatcher Interface

- The RequestDispatcher interface provides the facility of dispatching the request to another resource it may be html, servlet or jsp. It again has 2 methods eg.

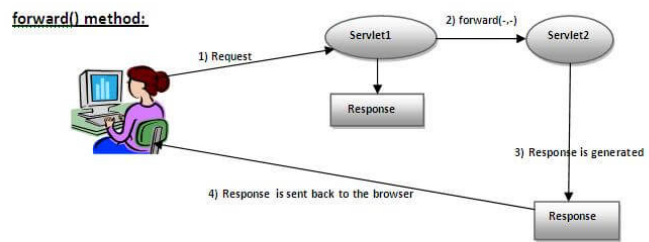
*RequestDispatcher rd=ServletRequestObject.getRequestDispatcher("servlet2");*

*//servlet2 is the servlet on which we want to forward our Request*

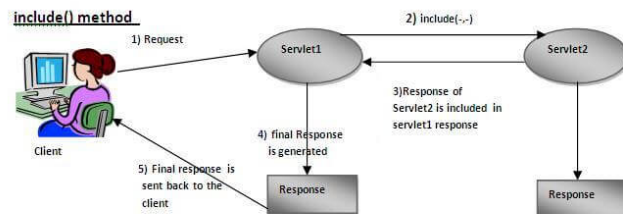
*rd.forward(request, response);//method may be include or forward*

- forward(servletrequest,servletresponse) :Forwards a request from a servlet to another resource (servlet,

JSP file, or HTML file) on the server.



- `include(servletrequest,servletresponse)`: Includes the content of a resource (servlet, JSP page, or HTML file) in the response.



- `sendRedirect()` method :The **`sendRedirect()`** method of **`HttpServletResponse`** interface can be used to redirect response to another resource, it may be servlet, jsp or html file.

• **What is the difference between forward and sendredirect?**

forward() method	sendRedirect() method
The forward() method works at server side.	The sendRedirect() method works at client side.
It sends the same request and response objects to another servlet.	It always sends a new request.
It can work within the server only.	It can be used within and outside the server.
Example: <code>request.getRequestDispatcher("servlet2").forward(request,response);</code>	Example: <code>response.sendRedirect("servlet2");</code>

• **Can you call a JSP from a servlet?**

```

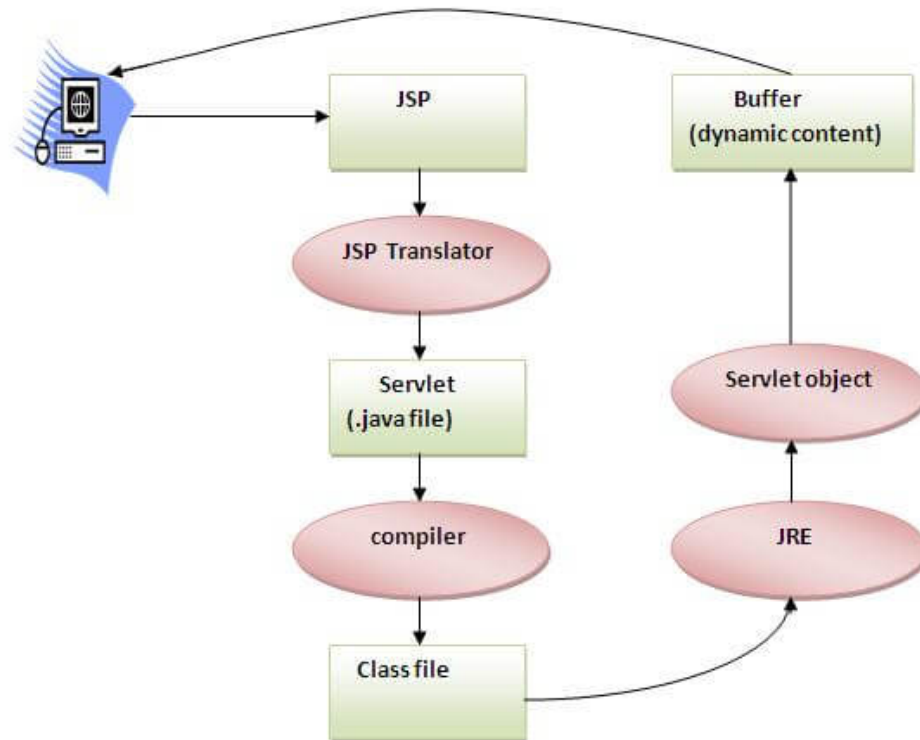
RequestDispatcher rd=request.getRequestDispatcher("/login.jsp");
rd.forward(request,response);

```

• **What is the difference between servletConfig and servletContext**

<b>Servlet Config</b>	<b>Servlet Context</b>
Servlet config object represent single servlet	It represent whole web application running on particular JVM and common for all the servlet
Its like local parameter associated with particular servlet	Its like global parameter associated with whole application
It's a name value pair defined inside the servlet section of web.xml file so it has servlet wide scope	<code>ServletContext</code> has application wide scope so define outside of servlet tag in web.xml file.
<code>getServletConfig()</code> method is used to get the config object	<code>getServletContext()</code> method is used to get the context object.
for example shopping cart of a user is a specific to particular user so here we can use servlet config	To get the MIME type of a file or application session related information is stored using servlet context object.

- **What are the ways of session tracking**
  - there are 4 ways of session tracking
    - Cookies
    - Hidden Form Field
    - URL Rewriting
    - HttpSession
- **What is the difference between Cookies and HttpSession?**
  - Both are mechanisms of establishing a client "state" in a stateless HTTP environment.
  - With cookie you can store a limited amount of data on the client's machine. It's not secured, and you can only store text in cookies.
  - HttpSession, on the other hand, allows you to store state information on the server.
  - it's much more secured (session data is on the app server, not client's box), you can store an "unlimited" amount of data (depends on your server's capacity), plus you can store complex data types (e.g. objects) in a session
- **How JSP is translated into servlet and loaded?**



- 
- **What is the life-cycle of JSP?**
  - `public void jspInit()` :It is invoked only once, same as `init` method of the servlet.
  - `public void _jspService(ServletRequest request, ServletResponse) throws ServletException, IOException`: It is invoked at each request, same as `service()` method of the servlet.
  - `public void jspDestroy()`:It is invoked only once, same as `destroy()` method of the servlet.
- **What are the JSP implicit Objects?**
  -

Object	Type
1) out	JspWriter
2) request	HttpServletRequest
3) response	HttpServletResponse
4) config	ServletConfig
5) session	HttpSession
6) application	ServletContext
7) pageContext	PageContext
8) page	Object
9) exception	Throwable

- **What are the ways of handling the exception in JSP?**
  - There are two ways to perform exception handling, one is by the `errorPage` element of page directive, and second is by the `error-page` element of the `web.xml` file.
- **What are the ways to include the result of another page?**
  - There are 2 ways to do this
    - by Include directive
    - by include action

include directive	include action
1) The include directive includes the content at page translation time.	1) The include action includes the content at request time.
2) The include directive includes the original content of the page, so page size increases at runtime	2) The include action doesn't include the original content rather invokes the <code>include()</code> method of Vendor provided class.
3) It's better for static pages.	3) It's better for dynamic pages.

