Page Naviagation Techinique

Page Navigation Techniques
Page Navigation=Taking user from 1 page to another page.

2 Ways
1. Client Pull
Taking the client to the next page in the NEXT request (coming all the way from client)
1.1 User takes some action --eg : clicking on a button or link & then client browser generates new URL to take user to the next page.

1.2 Redirect Scenario
User doesn't take any action. Client browser automatically generates new URL to take user to the next page.(next page can be from same web appln , or diff web appln on same server or any web page on any srvr)

API of HttpServletResponse i/f
public void sendRedirect(String redirectURL) throws IOException
eg : For redirecting client from Servlet1 (/s1) to Servlet2 (/s2) , use
response.sendRedirect("s2");

If the response already has been committed(pw flushed or closed) , this method throws(WC) an IllegalStateException.(since WC can't redirect the client after response is already committed)

2. Server Pull.
Taking the client to the next page in the SAME request.
Also known as resource chaining or request dispatching technique.
Client sends the request to the servlet / JSP. Same request can be chained to the next page for further servicing of the request.

Steps
1. Create Request Dispatcher object for wrapping the next page(resource --can be static or dynamic)
API of ServletRequest
javax.servlet.RequestDispatcher getRequestDispatcher(String path)

2.Forward scenario
API of RequestDispatcher
public void forward(ServletRequest rq,ServletResponse rs)

This method allows one servlet to do initial processing of a request and another resource to generate the response. (i.e division of responsibility)

Uncommitted output in the response buffer is automatically cleared before the forward.

If the response already has been committed(pw flushed or closed) , this method throws an IllegalStateException.

Limitation --only last page in the chain can generate dynamic response.

3. Include scenario
API of RequestDispatcher
public void include(ServletRequest rq,ServletResponse rs)

Includes the content of a resource @run time (servlet, JSP page, HTML file) in the response. -- server-side includes.

Limitation -- The included servlet/JSP cannot change the response status code or set headers; any attempt to make a change is ignored.