

Practical No. 8

Objective: Demonstrating send redirect and request dispatcher for sharing data and control across servlets.

Theory:

SendRedirect() will search the content between the servers. It is slow because it has to intimate the browser by sending the URL of the content. Then browser will create a new request for the content within the same server or in another one.

RequestDispatcher is for searching the content within the server. Its the server side process and it is faster compare to the SendRedirect() method. But the thing is that it will not intimate the browser in which server it is searching the required date or content, neither it will not ask the browser to change the URL in URL tab. So it causes little inconvenience to the user.

Source Code:

index.html

```
<!DOCTYPE html>
<html>
<body>
<form action="ReqDispatch" >
    UserName: <input type="text" name="t1" value="" /><br>
    Password: <input type="password" name="t2" value="" />
    <input type="submit" value="Submit" />
</form>
</body>
</html>
```

Request Dispatcher (ReqDispatch.java):

```
package ReqDispatcher;

import java.io.IOException; import
java.io.PrintWriter; import
javax.servlet.RequestDispatcher;
import
javax.servlet.ServletException;
import
javax.servlet.http.HttpServlet;
import
javax.servlet.http.HttpServletRequest;
import
javax.servlet.http.HttpServletResponse; import
javax.servlet.http.HttpSession;

public class ReqDispatch extends HttpServlet {
    protected void doGet(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException
    {
```

```

        System.out.println("First Servelet");
        PrintWriter pw=response.getWriter();
String str = request.getParameter("t2");
if(str.equals("Sana"))
{
    RequestDispatcher rd = request.getRequestDispatcher("secondservlet"); rd.forward(request,
response); // send the response of second servlet directly to the client

}
else
{
    pw.println("<h3>Invalid User</h3>");
    RequestDispatcher rd = request.getRequestDispatcher("index.html"); rd.include(request,
response); //include method carries the response of index.html includes it to the response of this
page and send it to the client
}
//HttpSession session=request.getSession();
//String str = request.getParameter("t2");
//session.setAttribute("Pass", str);
//response.sendRedirect("/secondservlet");//the first servlet redirects the client to the second
servlet for service.
}
}

```

secondservlet.java package

```

ReqDispatcher;
import java.io.IOException; import
java.io.PrintWriter; import
javax.servlet.ServletException; import
javax.servlet.http.HttpServlet; import
javax.servlet.http.HttpServletRequest; import
javax.servlet.http.HttpServletResponse; import
javax.servlet.http.HttpSession;

public class secondservlet extends HttpServlet {

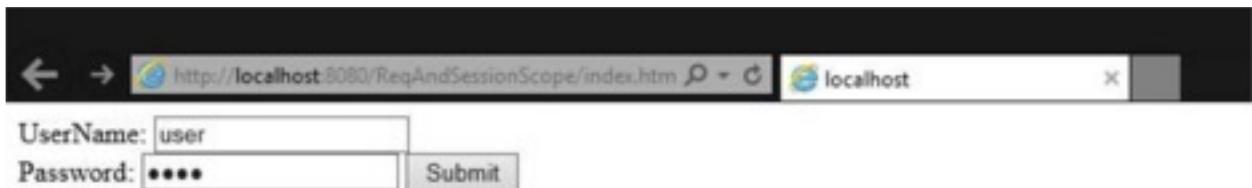
public void doGet(HttpServletRequest request, HttpServletResponse response) throws
IOException
{
    PrintWriter out=response.getWriter();
String str = request.getParameter("t2");
//out.write(str);
//HttpSession session = request.getSession();
//String str = session.getAttribute("Name").toString();
out.write("Welcome"+str);
}

```

```
}
```

```
}
```

Output:



Send Redirect (SendRed.java):

```
package SenRedirect;
import java.io.IOException; import
java.io.PrintWriter; import
javax.servlet.ServletException; import
javax.servlet.http.HttpServlet; import
javax.servlet.http.HttpServletRequest; import
javax.servlet.http.HttpServletResponse; import
javax.servlet.http.HttpSession; public class
SendRed extends HttpServlet {
protected void processRequest(HttpServletRequest request,
HttpServletResponse response)
throws ServletException, IOException {
response.setContentType("text/html;charset=UTF-8"); try (PrintWriter out =
response.getWriter() { out.println("<!DOCTYPE html>");
out.println("<html>"); out.println("<head>"); out.println("<title>Servlet SendRed</title>"); out.println("</head>"); out.println("<body>"); out.println("<h1>Servlet SendRed at " + request.getContextPath() + "</h1>"); out.println("</body>"); out.println("</html>"); }
}
@Override
protected void doGet(HttpServletRequest request, HttpServletResponse response)
throws ServletException, IOException {
HttpSession session = request.getSession();
```

```

        String str2 = request.getParameter("t2");
        String str1 = request.getParameter("t1");

        session.setAttribute("Pass", str2);
        session.setAttribute("User", str1);

        response.sendRedirect("secserv");
        processRequest(request, response);
    }

    @Override
    protected void doPost(HttpServletRequest request, HttpServletResponse response)
        throws ServletException, IOException {
        processRequest(request, response);
    }

    @Override
    public String getServletInfo() {
        return "Short description";
    }
}

```

secserv.java package

```

SenRedirect;

import java.io.IOException; import
java.io.PrintWriter; import
javax.servlet.ServletException; import
javax.servlet.http.HttpServlet; import
javax.servlet.http.HttpServletRequest; import
javax.servlet.http.HttpServletResponse;
import javax.servlet.http.HttpSession; public class
secserv extends HttpServlet {
    protected void processRequest(HttpServletRequest request,
        HttpServletResponse response) throws ServletException,
        IOException { response.setContentType("text/
        html;charset=UTF-8"); try (PrintWriter out =
        response.getWriter()) { out.println("<!DOCTYPE html>");
        out.println("<html>"); out.println("<head>");
        out.println("<title>Servlet secserv</title>");
        out.println("</head>"); out.println("<body>");
        out.println("<h1>Servlet secserv at " + request.getContextPath() + "</h1>");
        out.println("</body>"); out.println("</html>"); }
    }

    @Override
    protected void doGet(HttpServletRequest request, HttpServletResponse response)

```

```

        throws ServletException, IOException {
PrintWriter pw=response.getWriter();
    HttpSession session = request.getSession();
    String str1 = session.getAttribute("User").toString(); String
str2 = session.getAttribute("Pass").toString(); if(str2.equals("Sama"))
{
    pw.println("<h3> Welcome </h3>" + str1);

}
else
{
    pw.println("<h3>Invalid User</h3>");
response.sendRedirect("index.html");
}
//processRequest(request, response);
}
@Override
protected void doPost(HttpServletRequest request, HttpServletResponse response)
        throws ServletException, IOException {
processRequest(request, response);
}
@Override
public String getServletInfo() {
return "Short description";
}
}

```

Output:

A screenshot of a web browser window. The address bar shows the URL `http://localhost:8080/ReqAndSessionScope/index.htm`. The page content contains a login form with two text input fields labeled "UserName" and "Password", both containing the value "user". There is also a "Submit" button.



Result: The given program has been compiled and executed successfully.