

SERVLETS PART-8

Servlet Forwarding:

Forwarding request & response of one servlet to another servlet is called as servlet forwarding.

The main advantage of servlet forwarding is modularity.

Servlet Including:

Including request & response of one servlet into another servlet is called as servlet including.

The main advantage of servlet including is reusability.

Forwarding Vs. Including

Servlet Forwarding	Servlet
1) Forwarding request & response of one servlet to another servlet is known as servlet forwarding.	1) Including servlet into a as servlet inc
2) The main advantage of servlet forwarding is modularity.	2) The main including is r
3) In forwarding, only one pair of request & response created by web container.	3) In includi request & re container.

Forwarding & Including Example:

LoginServlet.java

```
package loginapp;

import java.io.IOException;
import java.io.PrintWriter;
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.PreparedStatement;
import java.sql.ResultSet;
import java.sql.SQLException;

import javax.servlet.ServletContext;
import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
/**
 * Servlet implementation class LoginServlet
 */
@WebServlet("/login")
public class LoginServlet extends HttpServlet {
    private static final long serialVersionUID = 1L;

    /**
     * @see HttpServlet#HttpServlet()
     */
    public LoginServlet() {
        super();
        // TODO Auto-generated constructor stub
    }
}
```

```
}
Connection con;
public void init(ServletConfig config)
{
    try {
        ServletContext sc=config.getServletContext();
        String s1=sc.getInitParameter("driver");
        String s2=sc.getInitParameter("url");
        String s3=sc.getInitParameter("username");
        String s4=sc.getInitParameter("password");
        Class.forName(s1);
        con=DriverManager.getConnection(s2,s3,s4);
    } catch (ClassNotFoundException e) {
        // TODO Auto-generated catch block
        e.printStackTrace();
    } catch (SQLException e) {
        // TODO Auto-generated catch block
        e.printStackTrace();
    }
}

/**
 * @see HttpServlet#doPost(HttpServletRequest request,
HttpServletResponse response)
 */
protected void doPost(HttpServletRequest request,
HttpServletResponse response) throws ServletException, IOException {
    // TODO Auto-generated method stub
    try {
        String s1=request.getParameter("uname");
        String s2=request.getParameter("pword");
        PreparedStatement
pstmt=con.prepareStatement("select * from uinfo where uname=? and
pword=?");
```

```
        pstmt.setString(1, s1);
        pstmt.setString(2, s2);
        ResultSet rs=pstmt.executeQuery();
        PrintWriter pw=response.getWriter();
        if(rs.next())
        {
            RequestDispatcher
rd=request.getRequestDispatcher("welcome");
            rd.forward(request, response);
        }
        else
        {
            pw.println("Invalid Username/Password");
            RequestDispatcher
rd=request.getRequestDispatcher("login.html");
            rd.include(request, response);
        }
        pw.println("</h1></body></html>");
    } catch (SQLException e) {
        // TODO Auto-generated catch block
        e.printStackTrace();
    } catch (IOException e) {
        // TODO Auto-generated catch block
        e.printStackTrace();
    }
}
}
```

WelcomeServlet.java

```
package loginapp;

import java.io.IOException;

import java.io.PrintWriter;
```

```
import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
@WebServlet("/welcome")
public class WelcomeServlet extends HttpServlet {
    protected void doPost(HttpServletRequest request,
        HttpServletResponse response) throws ServletException, IOException {
        String s=request.getParameter("uname");
        PrintWriter pw=response.getWriter();
        pw.println("<html><body bgcolor=green
text=yellow><h1>");
        pw.println("Welcome "+s);
        pw.println("</h1></body></html>");
    }
}
```

Servlet Redirecting:

Passing control from one servlet to another servlet is called as servlet redirecting.

In servlet redirecting, server instructs the browser to execute next servlet.

Forwarding Vs. Redirecting:

Forwarding

- 1) Forwarding request & response of one servlet to another servlet is called as servlet forwarding.
- 2) In forwarding, server itself forwards the request & response of one servlet to another servlet.
- 3) In forwarding only one pair of request & response created by web container.
- 4) Forwarding supports to forward servlet to servlet, jsp & html.
- 5) Forwarding works within the server only.

Redirecting

- 1) Passing control from one servlet to another servlet is called as servlet redirecting.
- 2) In redirecting, server instructs the browser to execute next servlet.
- 3) In redirecting separate pair of request & response created by web container for every servlet.
- 4) Redirecting supports to redirect servlet to servlet, jsp, html, php, asp, .. etc.,
- 5) Redirecting works within the server also and between two different servers also.

Redirecting Example:

LoginServlet.java

```
package loginapp;
```

```
import java.io.IOException;  
import java.io.PrintWriter;  
import java.sql.Connection;  
import java.sql.DriverManager;  
import java.sql.PreparedStatement;  
import java.sql.ResultSet;
```

```
import java.sql.SQLException;

import javax.servlet.ServletContext;
import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
/**
 * Servlet implementation class LoginServlet
 */
@WebServlet("/login")
public class LoginServlet extends HttpServlet {
    private static final long serialVersionUID = 1L;

    /**
     * @see HttpServlet#HttpServlet()
     */
    public LoginServlet() {
        super();
        // TODO Auto-generated constructor stub
    }
    Connection con;
    public void init(ServletConfig config)
    {
        try {
            ServletContext sc=config.getServletContext();
            String s1=sc.getInitParameter("driver");
            String s2=sc.getInitParameter("url");
            String s3=sc.getInitParameter("username");
            String s4=sc.getInitParameter("password");
            Class.forName(s1);
            con=DriverManager.getConnection(s2,s3,s4);
        }
    }
}
```

```
        } catch (ClassNotFoundException e) {
            // TODO Auto-generated catch block
            e.printStackTrace();
        } catch (SQLException e) {
            // TODO Auto-generated catch block
            e.printStackTrace();
        }
    }

    /**
     * @see HttpServlet#doPost(HttpServletRequest request,
     * HttpServletResponse response)
     */
    protected void doPost(HttpServletRequest request,
        HttpServletResponse response) throws ServletException, IOException {
        // TODO Auto-generated method stub
        try {
            String s1=request.getParameter("uname");
            String s2=request.getParameter("pword");
            PreparedStatement
pstmt=con.prepareStatement("select * from uinfo where uname=? and
pword=?");

            pstmt.setString(1, s1);
            pstmt.setString(2, s2);
            ResultSet rs=pstmt.executeQuery();
            PrintWriter pw=response.getWriter();
            if(rs.next())
            {
                response.redirect("welcome");
            }
            else
            {
                pw.println("Invalid Username/Password");
            }
        }
    }
}
```



```
RequestDispatcher
rd=request.getRequestDispatcher("login.html");
rd.include(request, response);
}
pw.println("</h1></body></html>");
} catch (SQLException e) {
// TODO Auto-generated catch block
e.printStackTrace();
} catch (IOException e) {
// TODO Auto-generated catch block
e.printStackTrace();
}
}
}
```

WelcomeServlet.java

```
package loginapp;

import java.io.IOException;
import java.io.PrintWriter;
import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
@WebServlet("/welcome")

public class WelcomeServlet extends HttpServlet {

    protected void doGet(HttpServletRequest request,
        HttpServletResponse response) throws ServletException, IOException {
```

```
String s=request.getParameter("uname");  
PrintWriter pw=response.getWriter();  
pw.println("<html><body bgcolor=green  
text=yellow><h1>");  
pw.println("Welcome "+s);  
pw.println("</h1></body></html>");  
}  
}
```

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